14,300 – 16,005

1936 – 1940

Collector: Philip A. Munz

14300 – 16005

6579

Record of plant collections
of

P A Munz
Pomona College
Claremont, Calif.

If this book is found,
please notify P A Munz

14300 Epilobium calif
slender petals white aging pink.
1 Boisduvalea densiflora violet-rose
2 Epilobium calif white aging pink
3 " annual, erect, 5-12 dm
panic.

v 4 Oenothera Hookeri
coarse, hirsute, with red papillae
capsules purplish on Ls, 3-4 cm long
low sea-bluffs, mt Tomales

14305 Eriogonum latifolium Sm.
2 mi no. of Bodega Sonoma Co.
6. Grindelia arenicola Hachuphylla
7. Epilobium adenocaulon occidentale
rose. offsets branched v. flat in ground, edge of road
8 Gilia squarrosa (green) annual
regular
9 Potentilla calycomica (COS) green

14310 Phacelia pinnata typica
light purple
14311 Godetia amoena Aug 8
no. of Jenner, Sonoma Co.
14312 Epilobium adenocaulon occidentale Aug 8
rose
14313 Epilobium adenocaulon occidentale 8/8

Aug. 7, 1936

so. edge of Kentfield, Marin Co.

annual, w with offsets, simple 1-3 dm

3 mi S. San Anselmo, edge salt marsh

" 3-5 dm high "

offsets branched 3-6 dm. "

open branched, rose veined deeper

open dry flat, 3 mi S. San Anselmo

biennial, 4-5 dm. high, stems red

leaves succulent, hairy; hyp & sepals red;

valves truncate - emarg.

Bay, 5 mi. so. of Tomales, Calif.

forming low rounded mats, sea-bluffs,

Calif. white to pink

5-6 dm across, with 305

6 mi no of Bodega, Sonoma Co.

simple, 1-5 dm

much branched, viscid, violet, fls quite

with 307

no. slope " " viscid

fls white

talus, with 143,07

roadside disturbed places, coast 5 mi

rose-lavender with deeper red spots.

damp rocky bank, Ft. Ross, Sonoma Co.

no turning

near brook, 11 mi. so Ft. Arena, Mendocino Co Anchor Bay white

✓
1313 14 Oenothera Hookeri T. & G.
plants 6–8 dm high
315 Epilobium adenocaulon occ.
14 316 Erythrophyllum caespitosum

14317 Epilobium adenocaulon occidentale

14318 Epilobium adenocaulon occid pink
19 Polystichum munitum
20 Dryopteris dilatatata
21 Dryopteris dilatata
22 Cystopteris ?
23 Struthiopteris spicant
24. Antirrhinum / violet

25 Boisduvalia —
26 Epilobium paniculatum "
27 Boisduvalia — "
28 Penstemon corymbosus on cliff So. Fork
29. Gentiana Muhlenbergia roadside (damp)
30 Epilobium calif " white
31 Eriogem niornatus Gray "
32 Centaurium ~~sol~~ littorale fill
33. Malacosphis obtusa " "
34 Chenopodium Bolnys sandy flats
Redwood Grove, "

roadside, ½ mi N of Anchor Bay, Mendocino Co 8/8
with 3

perennial; canyon-slope, Russian Gulch State Park, Mendocino Co 8/8

Rose, annual, + Aspects, sandy bank of brook, Russian Gulch

Aug 9.

15 mi SE of Ft. Bragg on road to Willets along small stream

damp spot Redwood Highway, 20 mi N. of Willets 8/9

Eel River Redwood Highway, 5 mi N of Humboldt Co - Mendocino Co line 8/9

So. Fork Eel River Williams Humboldt Co 8/9

14335 Oenothera Hookeri T. & G.
vacant lot, edge of town
papillae hyp greenish, sepals red
14336 Perâmium decipiens

337 Epilobium paniculatum dry
white, glaucous
338 Campanula prenanthoides blue-violet
339 Godetia viminea rose - "
40 Epilobium calif white
41 " minutum Lindl.

14342 Dryopteris oregana C. Chr.

43 Epilobium calif
44 Anthoceros

14345 Eriogonum nudum
46 Epilobium ~~trancisc~~ densiflorum Barbey Hosts, pale
47 Potentilla Douglasii Greller white
48 Mimulus moschatus sessilifolius pale yellow
49 Galium triflorum roadside
50 Hieracium albiflorum white dry
51 Rosa hippolenca calif "
52 Sidalcea Wallacei " rocks
53 Caulanthus — " "
54 Chaetanthes gracillima " "

Rio Del, Humboldt Co Calif Aug. 10
fls. pale yellow, stems red with red
capsules with red; stigma yellow
mossy places redwood grove Van Dugen R,
15 mi E. of Fortuna, Humboldt Co
roadside Little Van Dugen R. 15 mi east
of Bridgeville, Humboldt Co Aug. 10

with w or red spots, buds erect
wet spot
" "

springy hillside 5 mi W. of
Forest glen, Trinity Co Aug. 10

Aug. 11
roadside fill, Forest Glenn, Trinity Co
to white, often fresh " " 2300 ft
fresh, wet place, " "
" " "
, plant very viscid-slimy " "
seep " 2500
slope under pines " "
" " "
" " 3200
" " "
" " "

14355 Galium Bolanderi dry
56 Circaea — banks
57 Agoseris — near "
58 Adenocaulon bicolor white "
59 Tellima grandiflora " "
60 Adenotum pedatum alendicum
61 Gnaphalium palustre "
62 Euphorbia serpyllifolia prostrate
63 Cryptantha — erect
64 Trichostema laxum gray annual
65 Chrysopsis oregana common
66 Monardella odoratissima "
67 Zauschneria latifolia single
68 Aster foliaceus Lindl. rocky
69 Eupatorium occidentale Hook. Common "

14370 Mimulus Lagneae rose dry loose
71 " — yellow edge
72 Antirrhinum vexillo-calyculatum Brewerii lavender dry
73 Erigonum binineum pink "
74 Gilia — " "
75 Epilobium paine white "

76 Apocynum androsaemifolium pumilum pink
77 Lotus —
78 Amelanchier alnifolia pallida
79 Epilobium adenocaulon damp slope

rocks, above Forest Glenn 8/11 3200
of brook " " 3500
" "
" "
" "
wet sandy bank Little Trinity R., Forest Glen
dry " bottom
" " "
" " "
perennial, " " "
" " "
plant bushy "
places along stream
" " " purplish pale
slope, 1/2 mi E. of Forest Glen Aug 12 3300 ft
dry stream basin
loose slope
" "
" "
" " summit, 1/2 way Hay Fork to Weaverville

Willow Creek, Humboldt Co 8/12

14380 Epilobium calif punct
81 " panic
82 " minutum Lindl. White becoming
83 Agoseris —
✓84 Oenothera Hookeri T. & G. abundant
stems reddish, stigma yellow
plants 6-8 dm tall
85 Epilobium adenocaulon occidentale
✓86 Oe Hookeri T. & G. beach at

87 Lathyrus littoralis purplish blue
88 Polygonum Parowyckia woody
89 Eriogonum nudum dry gravel

90 Zauschneria latifolia with '89 ; low
91 Epilobium adenocaulon occidentale wet place
92 ~~Epilobium occidentalis~~ ~~Hooker punctum~~ white boggy
Adams Pt. NE of Crescent
93 Polygonum — gravelly
94 Phacelia leucophylla patches 1-2 ft
95 Agoseris —
96 Eriogonum oregana mossy rocks
97 Gentiana oregana deep blue
98 Habenaria ~~elegans~~ ~~leptoceratula~~? dry woods
99 Pellaea densa Hook
14400 Epilobium adenocaul roadside ditch
intricate
✓ calif

10 mi W. of Willow Creek, Humboldt Co 8/13

pink

" "
field 7 mi E of Arcata H. Co 8/13.
capsules with red stripes, sepals reddish

roadside ditch, Clam Beach 8/13
Crescent City, 8/13 common

with 86

" "
fill, 12 mi NE Crescent City on Grants Pass Road 8/13

wounded brush: clammy
on upper beach, Gold Beach, Ore. 8/14
place with Darlingtonia above
City, Del Norte Co 8/14
roadside fill, Gasquet
across " with 93

22 mi NE of Crescent City
dry slopes "

Fork, 1900 ft. alt., east edge Coos Co, Ore 8/15

14,401 Habenaria Michaeli Greene white.
2 Empetrum nigrum L creeping
3 Spiranthes porrifolia white
4 Epilobium adenocaulon occidentale red
5 Carex — Clumps
6 Orthocarpus — white yellow tracts
7 Epilobium adenocaulon occidentale rose-pink
8 Madia elegans rays red-brown at base
9 Epilobium adenocaulon occid white to pink
10 " paniculatum pink
✓ 11 Oenothera Hookeri glandular.
stems red, muricate stigma
clammy
12 Epilobium adenocaulon occid pink annual
13 Gayophytum ramosissimum T & G
14 Epilobium paniculatum jucundum purplish-rose
✓ 15 Oenothera Macbridae sandy roadside
hypo + calyx red
16 Orthocarpus yellow
17 Aplopappus Bloomeri Gray var angustatus
18 Chrysothamnus viscidiflorus Nutt.
19 Chrysothamnus nauseosus speciosus
20 Gayophytum diffusum sandy flat
21 " Nuttallii Abramsii
22 Phacelia heterophylla

sea-bluffs, Bandon Beach, Ore (Coos Co.) 8/15

" "

" , damp places

" , swampy " for ½ blvd

white " "

edge of small stream (2 mi N.) Grants Pass 8/16

dry slope " "

ditch 1 mi S " "

road "

simple or lr, 6 – 12 dm.

yellowish ♀ sepals reddish ♂

rr & roadside, 1 mi NE Central Point 8/16

ditch " "

roadside " Ore

" (2 " N Williamson R, east side of Klamath Lake 8/16

near Williamson River, 1 mi W of highway 97

with 14 & 15

dry slope Keno S. Ore

" "

" "

Sand Creek, 9½ mi S of Bend, Ore 8/17

14423 Eriogonum spergulinum
14424 Haskellia fusca
25 Epilobium adenocaulon
26 Potentilla — yellow
27 Gayophytum racemosum
28 Mimulus nanus ~~sepsonii~~ grant
29 Penstemon —
30 Bidens cernua L.

✓31 Oenothera irrigated fr
hyp red sepals slightly so fls small
32 Chrysothamnus nauseosus ~~speciosus~~ d
33 Aster canescens
34 Chrysothamnus viscidiflorus
35 Aster ~~canescens~~ Eatonii
36 Potentilla —
37 Mimulus nanus rose d

38 Epilobium panic jugum purplish red
39 Grindelia nana Nutt
40 Eriogonum dichotomum

14441 Lupinus Lyallii Gray violet volcanic sand
42 Aster alpigenus Gray "
43 Lonatogium Gairdneri (Watson) C.R. "
44 Carex — damp bank
45 Eriogon — violet " "
46 Epilobium Hornemannii " "

white, edge of ditch, Beaver Marsh, 8/17
70 mi So of Bend

sand near
moist sand, 2 mi So. of Lapine
" "
ditch "

field, 6 mi no. of Bend 8/17
dry slope, Bend, Ore "
" " "
" "
river bottom, "
" " "
dry roadside, 6 mi So of Bend "
" " 15 mi " of Maupin 8/18
at 3000 ft

So. slope of Mt. Hood above Government Camp
and, ca. 6500 ft. 8/18
"
" fls whitish
rank, 6000
"
a, running rootstock, red-violet

14447 Agoseris alpestris
48 Heracuim Scouleri
49 Aster ledophyllus
50 Calochortus subalpinus cup-shaped
51 ~~Monotropa~~ Hypopitys ~~Newberrya conjesta~~
52 Dathea pectinata
53 Phlox linearifolia marginata white
54 Castilleja oreopola deep watermelon
55 Lupinus latifolius subalpinus deep blue-violet
56 Polemonium intermedium pale blue
57 Osmorhiza —
58 Carex —
59 Pedicularis racemosa
60 Mimulus Lewisii Pursh rose
61 Arnica fulgens Pursh
62 Lipteria carrina P.-Jer
63 Mitella Breweri Gray green
64 Ribes lasiococcus " white
65 Oenothera
1-1.5 m. simple hyp. sepals red
66 Penstemon Richardsonii rose
67 Phacelia pinnata hispida with
✓ 68 Oenothera cheiranthifolia
sepals reddish hyp. green stem
cinereous throughout

with 44 8/18

" "

drier banks violet

" " white with gold beard, anthers white

" " ~~under conifers, honey-yellow~~

" conifers, honey yellow

damp banks whitish

Trunk, " ", prostrate

8/19

with white spot on banner

shade

"

Sun

Shade

edge small stream

damp bank

shaded "

" "

" "

Head of Hood River Valley 8/20

stigma ♂ greenish

dry gravel near roadside, 15 mi W. of Bingen, Wash

bb

river bottom at Bingen, Wash 8/20

ord, branched, not muricate 1-2 m tall

bracts spreading stigma green ♂

14469 Epilobium paniculatum (apicum) rose.

✓ 70 Oenothera
hyp. red, sepals pradish, stems reddish, 1-1.5 m.
petals orange in age

71 Epilobium Hornemanni offsets
72 Habenaria stricta green
73 Saxifraga arguta white
74 Epilobium Hornemanni rose
75 Valeriana sitchensis white
76 Gayophytum Nuttallii Abramsii
77 Epilobium glaberrimum glaucous

78 " adenocaulon pink tube
79 " paniculatum pink
80 Pyrus sitchensis berries red

✓ 81 Oenothera
stems bright red, muricate, mostly
bracts deciduous hyp & sepals

14482 Epilobium paniculatum ~ pink
83 Gnaphalium microcephalum
84 Hieracium albiflorum white
85 Arctostaphylos tomentosa
86 Gaultheria Shallon white-pink
87 Campanula Piperi pale blue
88 Oplopanax horridum shrub 3
89 Dicentra formosa deep pink

banks, Columbia River, Bingen, Wash. 8/20

Hood River Valley, 18 mi so. of Hood River Oregon 8/20 edge of field

stigma yellow ✕

Mitchell Creek, east slope Mt Hood 8/20 4000 ft

" " mossy boggy place

" " "

" " "

" " "

dry roadside Barlow Pass Mt. Hood 8/20 4100 ft

pink, springy slope, 3 mi E of Government Camp, Mt. Hood 4000

with 77

dry slope, with 77

" " Common

3 mi W. of Camas Wash 8/21

simple or few branched above

green stigma yellowish ✕

8/22 To

1500 ft. dry slope, trail from Staircase Lodge to 2000 ft. Lake Wagonwheel, Olympic Mts above Hodgport Wash

2500

fruit dark blue 2800

mossy bank 3000

to 3 ft. fruit reddish 3200 ft dump slope

" "

14490 Mertensia paniculata pulverulata blue, 3-7 dm
91 Circaea pacifica tuberous base
petals deeply notched, sepals entire
92 Epilobium Hornemanni deep rose pink
93 Claytonia asarifolia white
94 Saxifraga aestivalis pinkish
95 Heuchera racemosa brownish
96 Epilobium brevistylum rose, turions
97 Arabis Drummondii
98 Castilleja pexiporosa purplish red
99 Silene Douglasii white bifid
99 Phacelia pinnata pseudohispida white
14500 Hieracium albiflorum white
1 Polygonum Douglasii
2 Aster paucicapitatus white
3 Carex —
4 " —
5 Aster foliaceus frondosus
6 Grindelia stricta macrophylla lavender
7 Epilobium upper sea-beach
8 " adenocaul towards alp dry slope, roadside
9 " minutum Kudl. damp " slope
14510 Oenothera Lamarckiana?
✓ shoots x many spring rosettes
ca 3 mi E. of main entrance to
fls pale; byp x sepals red; stems
capsule green stigma ✗
plants cultivated in Olympia

damp slope near Wagonwheel Lake 3200 ft 8/22

bank of lake
dry banks
" "
"
"
"
"
bank of lake
"
dry bank.

Hood's Canal, 5 mi NW of Eldon Aug 24
roadside " "
3 m " "
" " "

old plant with seed-stalks from 1935 & 1936
near, on Highway 410 Olympia-Tacoma
Ft. Lewis
light red, with red papillae. leaves crinkly.
yellowish (large-flowered

14511 Oen Nuttallii strigosa
hyp v sepals red, petals rather pale
stems reddish, muricate
14512 Oen Nuttallii cheiranthifolia
stems red, little muricate; hyp v sepals
bracts persistent, ovate
14513 Epilobium paniculatum rose
14 Grindelia squarrosa serrulata
15 Epilobium paniculatum (adenocaulon) pale pink
16 Cryptantha flaccida
17 Gayophytum ramosissimum
18 Epilobium adenocaulon effects
19 Castilleja Suksdorfii tomato red
20 Senecio serra leaves 8-10 dm
21 Aster major violet
22 Amelanchier alnifolia typica
23 Actaea arguta Nutt brilliant red
24 Epilobium Hornemannii damp slope
25 Saxifraga Bongardi Presl
26 Epilobium Hornemannii
27 Oen Nuttallii cheiranthifolia Bartlett
stigma greenish yellow
hyp v sepals green
28 Oe. pallida Lindl. with 27
29 Aster conspicuus Lindl violet
30 Gayophytum ramosissimum T.G
31 Epilobium paniculatum pale pink

on Naches River 8/25
roadside 15 mi NW of Yakima
orange in age, stigma greenish yellow
sepal-tips entire + terminal short-z
1 mi East of Granger on Yakima River 8/25
green stigma greenish yellow ×
w reddish
sepal tips connivent
with No 1451 (

" "
roadside Wenatchee River near
Hell gate Forestry Camp at 2300 ft
dry gravelly slope
edge of meadow

damp sandy depression, Lodge Pole Pine
Forestry Camp, American River at 3500 ft

berries
Chinook Pass 8/24 5400 ft

ashy, stems red, not maculate
bracts persistent
edge field 6 mi W of Kennewick
Wash 8/26
dry slope, Kamela, Ore (SE of Pendleton)
4000 ft. 8/26

14532 Epilobium adenocaulon purplepans
33 Erigonum niveum Dougl dry slope
34 Epilobium paniculatum violet rose
35 Oe Boothii typica loose dry slope
white aging pink, diurnal, gl.
✓ 36 Oe. bank of
stems reddish, not muricate, P. 5 mi
stigmas green
37 Lupinus holosericeus violet-blue
38 Erigonum proliferum white
39 Gayophytum diffusum
✓ 40 Oe. Wachidae (A. Nelsn)
hyp. sepals red stems red
41 ~~Polygonum~~ Eriogonum majus (Meisn) P. per
42 ~~Eriogonum~~ Penicillatum
43 Epilobium adenocaulon
44 Scutellaria antirrhinoides
✓ 45 Oenothera strigosa
1 m + red stems
✓ 46 Oenothera ornata (Nels)
Arrowrock Reservoir Boise River, 7 mi
stems reddish petals deep
47 Epilobium paniculatum
✓ 48 Oe strigosa
NE of Hagerman, Ida 8/30

Rattlesnake Springs near Durkee, Ore 2700/ft 8/27
" "
"
Huntingtm, Ore 8/27
diffuse annual 3–6 dm
ditch, 1 mi so of Fruitland, Snake R
sep x hyp reddish 8/27 Dda

dry ridge Silver City Dda 8/28
dry slope, Twilight Gulch near Flint 5700

dry slopes x edge springy places

dry slopes
edge of wet spots
~~dry~~ slopes

roadside ½ way Nampa – Meridian
stig greenish x Dda 8/29
springy place, nr. side above
above Boise 8/29
orange in age
dry slope Kuna '46
edge alfalfa field 2 mi

14549 Chrysothamnus nauseosus
no of Corral, Blaine Co. Oda
50 Epilobium paniculatum Ladenolophus and hirsh
✓ 51 Oe. Macbridae nrigated
plants rect 6-9dm, mod
age. stigma × greenish
✓ 52 Oe strigosa
53. Epilobium adenocaulon
54 Boisduvalia densiflora

✓14555 Oe. strigosa

56 Epilobium adenocaulon Hausskn.
57 Gentiana affinis Gusch.
58 Franseria acanthocarpa
59a Chrysothamnus stenolepis
60 Gutierrezia Sarothrae

✓14561 Oenothera
hyp. sepals reddish petals orange
14562 Epilobium no turions
63 " ovalifolium Rydb. with turions
64 " adenocaulon no "
65 Aster frondens (Gray) violet
66 " conspicuus Lindl "
✓ 67 Oenothera strigosa

low shrub 3 dm. Conrad Creek 3 mi
at 5600 ft 8/30 dry flat
rose-purple with deeper veins with '49
field with '49
w less virgate; petals yellowish in
yellow or orange
with 145 46
" "
" "

---

edge of ditch 5 mi north of
Lima, Mont 8/31
edge creek, Humphrey Ida Wyoda Pass 8/31
" " 6000
sand dunes 5 mi so of Dubois, Ida
" "

upper bank, Flathead Lake, Polson, Mont
in age. plants 1-1.5 m. Sept. 2
edge small stream, Jocko Lakes, Mont
5000 ft. Sept. 1

wet banks
dry roadside
3 mi E. of Arlee, Mont on road to
Jocko Lakes

14568 Epilobium adenocaulon rocky
turion-like rhiz offset-like
✓ 69 Oe.
✓ 70 Oe.
✓ 71 Oe strigosa
72 Grindelia perennis A. Nels
73 Chrysothamnus nauseosus typicus
low rounded shrub 4 dm
74 Polygonum Douglasii Greene
✓ 75 Oe. ——
76 Epilobium panic.
77 ~~Oenothera~~ Aster adscendens
✓ 78 Oe. strigosa

Sept 4
shores of Avalanche Lake, Glacier Park
6000 ft?
" edge of field, 7 mi No of Helena, Mont
Sept 5
" " " , 1 mi W. of Three Forks Mont
Sept 6
" " 17 mi S of Livingston, Mont
" road 20 " " " Sept 6
" " "

dry banks N Fk of Snake R. Wacks
Camp, no E. Ida Sept 7
irrigating ditch 3 mi SW of
Payson, Utah Sept 9.
roadside, 3? mi no of St. Anthony, Ida
Sept. 8

14579	Oe.	13357 cult
	× 80 3 plants	1 pubes bud
14581		13585 cult Bilopi
14582		13529 cult
14583		13561 cult
14584		13546 cult
14585		13566 "
✓ 14586	Oenothera	Cherry A "
14587		13523
14588		Tidestromii
14589		Lexington
14590		13544
14591		13557
14592		Hot Springs

Oct. 15, 1936

2 smooth

Oct 11

Oct 11

"

"

"

Oct 16

14593 Eriogonum nodosum

94 Oenothera cult. seed

95 " "

96 " "

97 " "

98 " longissima "

99 " macrosiphon

14600 " canovirens "

1 " "

2 " "

3 " Hookeri "

4 " subulifera "

5 Senecio bernardinus Greene

Bear Lake

6. Potentilla Lindleyi Greene

7 Oenothera

8 "

9 "

10 "

11 "

12 "

13 "

14 "

15 "

16 "

17 "

18 "

dry gulch, Whitewater Creek May 5, 1936

d of 13028 July 18

13029 "

Omaha-2

13236

Las Vegas, Nev

13268

Deam 55423

Dowa-1

13276a

Wolf 6233

M 13020

loose soil, edge of swampy place, no east corner

May, 1936

sandy soil, Mt. Olympus, Laguna Beach 4/20

Wiegand Great Lakes parviflora 4-29

Cory 9290 "

Wolf, Jon 6172

" 6223

13511

Lexington

Cherokee 13523

13516

13613

13497

13512

13514

14619	Clemothera	Strasbaugh
20	"	Scully
21	"	Magnolia
22	"	13560
23	"	13546
24	"	pycnocar pa
25	"	Micaville
26	"	13547
27	"	13530
28	"	13548
29	"	13544
30	"	13558
31	"	13528
32	"	august is
33	"	Tidestro
34	"	Cherry C
35	"	"
36	"	13519
37	"	13561
38	"	13557
39		13529
40		13566
41		13555
42		mr Lake -
43		Wolf 6
44		A-50
45		

4-29-1936

car pa Wiegand
ille 13515

4-28

st iscimen - Wiegand
ut romii
wy Chase A
" B

June 1

sent by Cleland (Mather)
13388

12-28-35

14646	Oe.	13398
7		13400
8		13386
9		13387
50		13375
51		13405
52	Polygonum hydropiperoides	
3	" lapathifolium	
4	Sorghum halepense	
5	Aplopappus Palmeri	
6	Xanthium pennsylvanicum	
	Oenothera	13407
	"	13471
9	"	13478
14660	"	13480
61	"	13483
62	"	8 mi Skyline
63	"	13484
64	"	13524
65		13510
66		13517
67		13542
68		13501
69		mmo
70		Victorin
71		"
72		Hitchy

12-28-35

Santa Ana R near Ruiem Oct 21, 1935

12-27

Va

flicks

colypes

Oct 3, 1932

2185

14673 Oenothera

4 "

5 "

6 "

7 "

8 "

9 "

80 "

Muny 13376

~~Kuma~~

New Brunswick

13362

13351

13354

40 mi N. Richmond, Va

13357

13585

14681 Oenothera

82 "

83 "

84 Artemisia Stelleriana Pallas

85 Oenothera

86 "

14687 Aquilegia

sepals - spurs red

petals yellowish

16

wick

d, Va

12-26

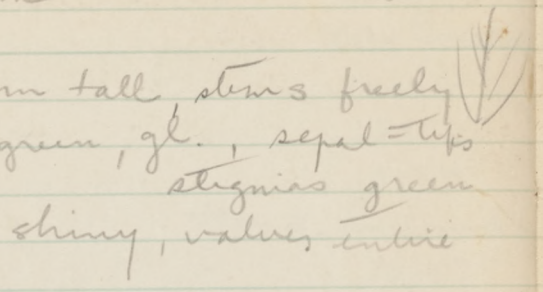
12-22

Peabody, Essex Co., Mass. 7-19-1930
Plum Island, Newbury "
"
"
3 mi So. of Newbury
Avon, Norfolk Co., Mass July 25, 1930

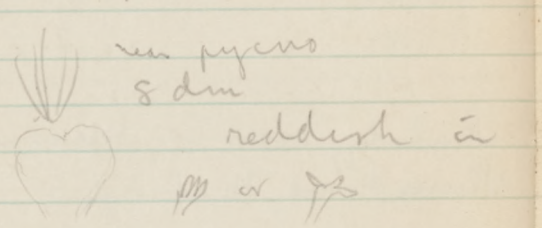
grown at Claremont (June 3, 1937)
form rosette form
Keystone Spring
N.Y. Mts., Mohave Desert
(Oct., 1935)

14688 Oenothera near nutans

about 8 dm tall, stems freely
hyp. seps green, gl., sepal-tips
red in age stigmas green
capsules shiny, valves entire

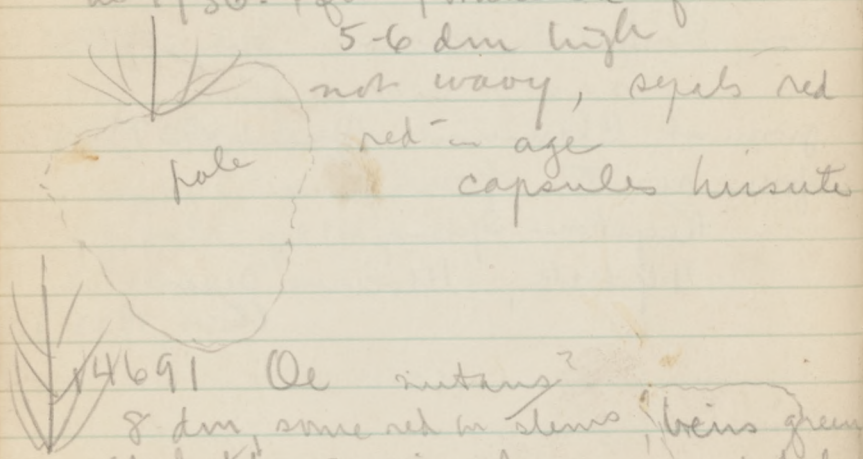


14689 Oe
in 1936
petals
yellowish



nu pycno
8 dm
reddish in
ff or fs

90 Oe
in 1936. freely branched from base
5-6 dm high
not wavy, sepals red
red in age
pale capsules hirsute



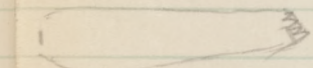
14691 Oe nutans?
8 dm, some red in stems, buds green
sepal-tips connivent, petals
stigma green

July 4, 1937

Murr 13514 cultivated, 5 plants which had not flowered in 1936. branched, ~~green~~, all with some red, connivent; petals clear yellow, not

bracts decid.

Strasburgh 1 plant did not flower stems green, sep + hyp hairy age, sepals connivent, stigma lobes bracts spread, persistent



Wolf 6223, 4 plants, did not flower sepals hirsute, no free tips. leaves ~~-~~ lanceolate, bracts persistent petals stigma yellow green

Murr 13497, 2 plants from 1936 bracts decid. sepals + hyp green, gl scarcely evergent age, capsule shiny

14692 Oenothera

July 4 grayish freely branched, 7-
& papillate leaves not
sepals hirsute, connivent, hypa
stigma yellow ✕ bracts
capsule reddish on each face

14693 Oe. mutans
July 4 stems with some red
petals yellow

July 5
14694 Oe Hookeri
leaves very wavy & crinkled
pink in some of midribs

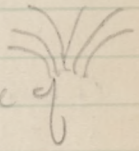
95 Hookeri
leaves rather flame not very
Hookeri scarcely any pink

14696 Hooker
leaves very wavy & crinkled
veins green

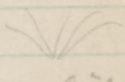
Wolf 6172 5 plants of 1986

9 dm. tall, stems with some red
very wavy, veins green
reddish, ~~at base~~ petals small, pale
spread orange red in age
persist

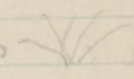
13497
M(13279) 2 plants of 1986
stigma green bracts dead
scarcely orange in age



M 14314 rosettes
mostly green, slight tinge of
very Lamarckian-like



M 14304 rosettes
crinkled, narrower, more like
, slight in midribs



M 14384 rosettes
like Lamarckiana

14697 Oe. Hook
very wavy & crinkled

98 Oe. Hook
narrower mes, quite wavy

99 Oe. Hook
long, pointed, rather narrow

14700 Oe. Machrihanish
quite plane, veins mostly

701 Oe. Machrihanish
quite plane, veins green

702 Oe. ornata
plane, veins green

703 Jamesii
elongates early

14704
leaves slightly crinkled

14705
leaves slightly crinkled

July 5

M 14510 rosettes
veins green Lamarckiana-like

M 14386 rosettes smaller
v crinkled, midribs pink

M 14575 leaves
quite plane, veins green

M 14551 leaves
green

M 14415 leaves

M 14546 leaves

Hoplains 9 rosette-axis
leaves somewhat crinkly, midrib
green

M 14470 rosette flat
along green midrib

M 14465 rosette quite flat
along green midrib

14706
rosettes ascending
purplish midrib

707
rosettes flat

708

709 cheradoflula
July 20 leaves quite glaze, green
red upper leaves spread
somewhat fasten. Mass central

710 strigosa
1936 mostly rosette

14711 Jamesii
gave way to stems
no red.

14712 Jamesii
temporary stems tend

14713 Jamesii
others caulescent stems

July 5

M 14481
leaves quite crinkly along

M 14527
leaves slightly crinkly along green midrib

M 14512 rosettes flat, leaves slightly crinkly along green midrib

M 14468 rosettes rather flat young stem slightly side branches developing but latter OK

Hitchy 2185 1 plant from few side branches

M 13575 rosettes quite light green, plants 6-8 dm

13580 like 14711, rosette to be more reddish

Hopkens 2 only 1 rosette green

July 20

14714 muricata
slightly wavy, midvein

15 stigosa
wavy rosette

16 more like muricata
wavy some pink

17 like muricata
wavy, some pink on midrib

18
as 14, 16, 17 leaves
slight wavy

19
wy ▾ central rib in
crinkled along midrib

14720

14721
grayish green leaves

14411 rosette, leaves broad
slight pink in 2 plants

14511 leaves narrow, pinte

14545 leaves wide, slightly
in midribs

14552 leaves wide, slightly

14548 rosettes not so flat
rather wide, veins green, very

14578 side branches develop
3. leaves rather wide, slightly
veins slight pink

14536 like 14519

14570 narrow wavy
like 14714 veins green

July 20

14722

14723

14724

14725

14726

14727
loose, side branches
like 14726

14728
central stem beginning

14729

14730
changed early from rosette

14731

14555 like 14721

14567 " "

14571 " "

14569 " "
not leaves under

14561 like 14725

Leonard rosettes rather
beginning, leaves much

Fargo side branches
leaves much like 14726

Haskett like 14728

Demaree 13776 plants
to stem . muricate

Demaree 14076 like 14730
not muricate

July 20

14732

33

July 24

14734
rosettes ascending
35
" flatter
36
" "
37
rosettes ascending
38
" "
39 " "

40
rosettes rather flat
41
" " "
42
" ascending

Yellowstone rosette flat
Scandescent

Cloleay rosette flat

novae-Scoliae
green slightly crinkled along mid
Victoriii intermedia
" " " "
insignis
green not wavy
para tamaricifolia
crinkly, 2 pp, green
berensis
narrow plane, green
ammophiloides laurentii
mist. lineavis
very narrow, plane, green
pycnocarpa
green plane
Victoriii parviflora
green rather plane
parva
green " "

July 24

14743 rosettes rather flat

44 " " "

45 " " "

46 " " "

47 " ascending

48 " "

49 rosettes flat

50 rosettes flattish

51 " "

52 " "

bifloriflora cruciata
green (pink faint in midrib)
leaves slight crinkled

bifloriflora
midrib pinker
roseiflora
midrib slightly pink

rubricapitata
midrib slight pink, vein crinkled
subterminalis
" green "
niagarensis
" pink or green, plane
Hazelae
veins pink, plane

deflexa bracteata
veins pink some crinkling
laevigata var. similis
veins green rather plane

flecticaulis
" green rather plane

July 24

14753
rosettes flat
few red spots

14754
rosettes flattish

55
rosettes flattish
red spots on leaves

56
rather flat
diseased-looking

57
rather flat

58
flat

59
flat

60
flat

61 flat

62 flat

Victorinia undulata
vein green, undulate margin

Lamarckia × brevistylis
vein green, crinkled leaves
angustissima quebecensis

vein pink in 4, green in 1
rather plane

Sackvillensis
very crinkled, midribs almost white

grandifolia
green undulate th

Hazeldæa parviflora
midrib pink, plane

albinervis
midrib whitish, plane

deflexa
midrib phlish, ~~pow~~ somewhat crinkled

leucophylla
green plane

Hookeri
midrib pink

Sept. 15

14763
4 side branches from one of them
~~branches~~ spreading, stem somewhat red,
~~14776~~

14764
central stem & infruit
muricate, green angled
oblong ~~oligum~~ greenish
capsules short, not red

14765
1 with central & lateral 3 pr.
muricate, little red. Ovl oblong
capsule short, green

14766 Jamesii
without aphids
stems green, not muricate
flower pale, aging slightly
fruit green, M

14767 Jamesii
1-1.3 m stems
reddish

14304 3 plants in rosette, with 3 ft. long
muricate, capsules not much red long narrow

14384. 3 plants, all 3 with 3 ft. high.
bracts spreading leaves rosette not red in drying

14510 3 plants, 2 in rosette, branched
-ooth bracts spreading, stigma yellowish
of petal >1
Hopkins 9. 3 plants 1.5 m
grayish bracts spreading
sepals reddish stigma green
red

Hopkins 2 4 plants all
mostly green sepals slightly

14768 Jamesii
stems reddish

14769 Jamesii
slightly reddish

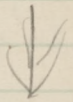
14770 cheradophila
lateral stems sprawly
centrals in rosettes or
stems reddish, ashy, not
stigma green ♀

14771
branched rosettes, 1 with

14772
ashy

14773
centrals in 2, 1 fr w sv
viscicate, mostly red above

13580 4 plants 1.5 m

13575 3 plants  1.5 m

14468 3 plants
with rosettes & flowers 1 m
flower but prostrate
communicate

14512 3 plants 2 in
sprawling stems

14527 branched rosettes

14481 sprawling flat
lateral stems 3 ft.

greenish yellow equals green

petal

14774

erect branched, 2 m.
sepals green, stigmas

14775
erect, branched, 1.5 m.

14776
rosette with lateral rosettes
simple, erect, flowering

14777
central + 2 with lateral

14778
central + lateral, all

Denn 13776 4 plants
stems little red, muricate.
green, # × #

Denn 14076 3 plants
green stems

Leonard 4 plants, 1 in
3 with central stem 6-8 dm
from base.

Fargo 4 plants, 3 with
rosettes

14578 3 plants, stems
sprawling, red

14779 Ce. [sheared] caespitosa crinita (Rydb.) Munz

14780 " " near "

14781 Linum Lewisii Pursh

2 Ce. decorticans rutila

3 Phlox Stansburyi (Torr.) Heller

4 Scrophularia

5 Mimulus

6 "

7. Cryptantha

8 Galium Munzii carneum

9 Penstemon Bridgesii Gray

14790 Phacelia crenulata funerea

91 " curvipes Torr.

92 " hispida?

93 Salvia pachyphylla Epling

94 Lygodesmia spinosa

95 Erigeron aspenginens Blake

96 Chaenactis Douglasii var. alpina

97 Tanacetum camum Eat.

98 Psathyrotes annua (Nutt) Gray

99 Cirsium neomexicanum Gray

14800 Astragalus triflorus morans Crum?

1 " oophorus Wats

2. Calyptridium Parryi Torr.

3 Cryptopsis hymenoides

4 Eriogonum mancifolium T & G

Panamint Mts. Inyo Co. Calif
with T.W. Periam

July 8, 1937 dry gravelly benches, Trail
Thorndykes to Telescope Peak, at 9800 ft

" "
" 10,200
" 5800
" 9800
" "
" "
8600
10,200
"
"
purple 9000
pale blue 8800
8800
8800
9800
10,000
gray 11,000
11,000
Wild Rose Canyon July 9 2500
" 5500
Trail 9800
9600
10 000
9800
10 000

14805 Physocarpus alternans (Jones) Howell
6 Carex subfusca W. Boott
7 Cystopteris fragilis
8 Acer glabrum Torr.
9. Melica stricta Bolander
10 Ribes montigenum McClatchie
11 Heuchera rubescens Torr. var. glandulosa Rydb.
12 Astragalus mohavensis Wats.
13 Silene montana Wats.
14 Stipa coronata Thurb var. depauperata
15 Eriogonum deflexum Torr.
16 " nudum Dougl. var.?
17 Epilobium angustifolium L.
18 Lupinus excubitus Jones
18a " "
19. Holodiscus
20 Amelanchier alnifolia var. Covillei
21 Astragalus oophorus Wats.
22 Gayophytum racemosum Greene
23 Mentzelia congesta (Nutt.) T. & G.
24 Penstemon Palmeri Gray
25 Gilia filifolia Nutt. var. diffusa Gray
26 Gilia
27 Phacelia Breweriana glandulifera
28 Mimulus rubellus Gray
29 Phlox Stansburyi (Torr.) Heller
30 Mimulus floribundus
~~31 Gilia aggregata~~

		July 8
Eagle Springs,		10,000
"		"
"		"
Telescope		10,400
		10 500
		10,500
"	white	10,500
		9000
		8800
(Jones) Hitchc.		9000
Wild Rose C.		2500
"		6500
Thorndyke's Canyon		8000
"		7500
"		7500
"		"
Wild Rose C.		7500
Thorndyke's C		7700
Wild Rose		7500
"		"
Thorndyke's C		7400
"		
"		7800
"		"
"		"
"		"

14831 Gilia pungens Tenuiloba
2 Monardella linoides Gray
3 Galium Munzii carneum
4 Penstemon Rothrockii Gray
5 Castilleja affinis H. & A.?
6 Solanum Xanti Gray var?
7 Sambucus velutina D. H.
8 Galium Hallii?
9 Symphoricarpos longiflorus Gray
40 Hulsea heterochroma Gray
1 Chaenactis Douglasii H. & A.
2 Brickellia oblongifolia linifolia
3 Viguiera multiflor nevadensis
4. Crepis nana Richardson
5 Streptanthus cordatus Nutt.
6 Phoradendron densum Torr.
7 Carex alma Bailey
8 " abrupta Mkze
9. Pellaea Breweri Eaton
14850 Acer glabrum Torr. var?
1 Melica stricta Bolander
2 Heuchera ~~sanguinea~~ rubescens glandulosa
3 Poa nevadensis Vasey
4. Jamesia americana T. & G.
5 Ribes cereum
6 Calochortus Nuttallii Torr. var?
7 Chamaebatiara Millefolium

Thorndykes	7000
" Canyon	7200
"	7000
" Canyon	7200
"	7000
"	7000
" Canyon	7400
Telescope Peak	11000
Thorndykes Canyon	7200
Thorndykes	7000
"	"
"	"
"	"
Telescope	11,000
Thorndykes	7000
"	"
" C	7500
"	"
"	7700
"	7700
"	7800
"	7800
"	"
"	"
"	"
"	"
"	"

14858 Aquilegia formosa caelifax?
9 Rosa Woodsii var. ultramontana Jeps
14860 Descurainia Sophia (L) wats
1 Cowania Stansburiana Torr
2 Chorizanthe spathulata Small
3 Elymus condensatus
4 Calypteridium Parryi
5 Pinus aristata Engelm.
6 " flexilis James
7.

14867 Amsonia brevifolia Gray
8 Descurainia brachycarpa
9 Sphaeralcea ambigua
14870 Oenothera brevipes Gray
1 Anthrichinum filipes
2 Oenothera chamaenerioides Gray
3 Amsinckia tessellata
4 Gilia scopulorum
5 " demissa
6. Cryptantha pterocarya
7 Mentzelia
8 Amsinckia tessellata
9 Oe. refracta
80 Cryptantha barbigera (Gray)
1 Lepidium lasiocarpum

Thorndyke's Canyon	7400
"	7200
"	7000
"	7000
"	7000
"	"
"	"
Telescope Peak	10500
"	"

Spring Vacation trip - April 1937

April 3.

Mc Cullough Mts., Clark Co., Nev.

"

14882 Eriogonum trichopes Torr.
3 Oe. clavaeformis aurantiaca
4 Chaenactis
5. Stryptanthella longirostris
6. Dichroa rea calyc Harv.
7 Oe. deltoidea Torr. & Frem. var.
8 Abronia villosa Wats.
9 Phacelia crenulata
90 Brodiaea hyacinthina
1 Gilia latiflora Gray
2 Phacelia calthifolia
3 Monolopia major
4 Nemacladus rubescens Greene
5 Dalea mollis mollissima
6 Gilia dichotoma
7 Nama demissum Coville
8 Ruppia maritima
9 Cirsium mohavense
14900 Mohavea breviflora Cov
1. Mimulus rupicola
2 Salvia funerea
3. Phacelia Dvesiana Torr.
4 Menodora scabra
5 Baileya multiradiata
6 Brodiaea hyacinthina
7 Anemone tuberosa
8 Ellisia

Boulder City, Nev. April 4

ambigua (Wats.) Mung

McCullough mts April 3
no. end Charleston Mts " 5
Bradbury ~~Spring~~, Inyo Co " 6

"
"
"
"
"

Artists Drive, Death V.
Bad water "
Cow Creek "

"
"
"

limestone crevices
wash

Last City, Nev. April 5
10 mi NW of Valley of Fire " 4
Valley of Fire

Gypsum Cave

14909 Lesquerella Palmeri
10 Gilia inconspicua
11 Phacelia Fremontii
12 Amphiappus "
13 Atriplex hymenelytra
14 Phacelia calthifolia
15 Ce. decorticans condensata
16 Eschscholtzia
17 Eriophyllum lanosum
18 Physalis crassifolia
19 Mentzelia tricuspis
20 Plantago
21 Ce. multijuga parviflora
22 Dyssodia Thurberi
23 Phacelia rotundifolia
24 Festuca octoflora
25 Ce refracta Vats
26 Enceliopsis argophylla (Eat) Nels
27 Lycium Andersonii
28 Pectocarya platycarpa
29 Draba cuneifolia
30 Rafinesquia neomexicana
31 Cryptantha
32 Gilia setosissima gray
33 Amsonia brevifolia tomentosa Jeps
34 Gilia

Gypsum Cave April 5

McCullough mts
Gypsum Cave

14935 Festuca megalura
6 Hordeum nodosum
7 Androsace acuta
8 Oe. micrantha exfoliata
9 Pectocarya platycarpa
14940 Condalia Parryi
1 Monoptelm bellioides
2 Oe

14943 Muhlenbergia rigens
44 Chenopodium Fremontii
45 Aster canescens
46 Eriogonum Kennedyi austromontanum
7 Bouteloua gracilis
8 Fremontia calif.
9 Artemisia dracunculoides Pursh
14950 Nicotiana
1 Polypogon monspeliensis
2 Chrysothamnus nauseosus leiospermus
3 Aplopappus acradenius eremophilus
4 Solidago confinis
5 Salvia pachyphylla Epling
6 Chrysothamnus viscidiflorus puntus
7 Gilia virgata sapphirina
8 Brickellia calif.
9 Thelypodium affine Green
60 Atriplex Torreyi Wats.

near Lake Elsinore March 27

Puddingstone C, San Dimas 3-26
White water Canyon 3-15

Cow Creek, Death Valley April 5
Gypsum Cave " 5

1 mi So Old Rose Mine Oct. 9.

Cushenbury Canyon
2 mi W. of Springs

1 mi So Old Rose Mine

Cushenbury Canyon
2 mi W. of " Springs
Box S

14961 Stephanomeria pauciflora
2 Rosa mohavensis
3 Dva axillaris
4 Arundo donax
5 Eriog. deflexum
6. Cirsium mohavense (Greene) Jeps
7 Atriplex confertifolia
8 Suaeda fruticosa
9 " Torreyana Wats
14970 Gutierrezia lucida Greene
1 Psathyrotes annua
2 Asclepias mexicana Cav.

14973. Verbena Goodingii
4 Cryptantha barbigera
5 Triodia pulchella
6. Dc. multiseta Wats.
7 Eriogonum inflatum
8 Muhlenbergia Porteri
9 Aplopappus spinulosus
14980 Coldenia hispidissima
1 Nothalaena Parryi
2 Argemone platyceras
3 Ephedra nevadensis
4. Stipa speciosa
5 Galium stellatum eremicum
6 Stanleya pinnata

Cushenbury Canyon Oct. 9
2 mi W of Cushenbury Springs

Box "S"

1 mi So of Old Rose Mine

Lower Grand Canyon, trail to Rampart Cave June 16

trail to Muav Cave June 17, 1937

14987 Tidestromia oblongifolia
88 Atriplex confertifolia
89 Agropyron Smithii ?
90 Suaeda
91 Aplopappus acradenius eremophilus
92 Adiantum Capillus-Veneris L.
93 Phragmites communis
94 Cirsium undulatum (Nutt.)
95 Mentzelia
96. Qe. multiziga
97 Hilaria Jamesii
98 Agave utahensis
99 Cassia Covesii Gray

15000 Qe. desertícola
1 Fuchsia thymifolia HBK
2 Penstemon gentianoides Dm
3 Stachys
4 Penstemon campanulatus
5 Chimaphila umbellata
6. Salvia cyanea Benth
7 Geranium bellum
8 Salvia fulgens
9 Qe. longissima Rydb.
10 Qe. ?
11 Cordylanthus Kingii Wats
12 Qe. lavandulaefolia glandulosa

Trail to Muav Cave June 17

Quartermaster Canyon

Clark Mt. Pass June 18

~~Quartermaster Canyon June 17~~

Aug 22
Cañada de Contreras, S.W. of Mex City 10,000 ft

"

La Verkin, Wash Co., Utah July 26
1 mile no of Glendale, Utah
Ruby's Inn, Bryce

15013 Oe. stigosa
14 Epilobium adenocaulon
16 Oe.
15 Oe. trichocalyx
17 Epilobium Halleanum
18 " Halleanum
19 Oe
20 Epilobium Halleanum Hausskn
21 " adenocaulon
22 " Hornemannii Reichenb
23 " adenocaulon Haussk
24 " saxicolum Haussk
25 " paniculatum
26 Gaura macrocarpa Rothrock
27 ~~Comp~~ Bellis glutinosa Spreng.
28 Salvia Regla Cav
29 " Fowleri Greene
30 Penstemon barbatus (Cav.) Roth
31 Castilleja
32 Salvia Greggii Gray
33 ~~Comp~~. Stevia salicifolia Cav.
34 Oe. Greggii var. Pringlei
35 Eustoma
36 Oe. speciosa Childsii
37 Gaura parviflora var. lachnocarpa
38 " " typica
39 Oe. iniqua?

Bellis glutinosa Spreng

3 mi SW of Heber, Utah — July 28
Daniels Canyon, SE of Heber — "
Dinosaur Nat. Monument, Utah — "
Skull Creek P.O., Moffatt Co., Colo — 29
East side, Rabbits Ear Pass, Jackson Co., Colo
"
Brookston near Steamboat Springs
west base of Cameron Pass

Sheep Creek — 7500 — Aug. 1

Paso del Diamante near Saltillo, Mex 7000 Aug 9

var. nana Gray

swales, Rio Nazas near Ciudad Lerdo, Durango Aug 10

6 mi W. of San Pedro, Coahuila — Aug. 11

15040 Gaura coccinea parvifolia
1 " parviflora var. Lachnocarpa
2 Oe. irrigua
3. Oe. (Raimannia) macrocalcis Gray
4 Jussiaea suffruticosa L
5 "
6 "
7 " pilosa HBK
8 Oe. Simsiana Ser
9. ~~Jussiaea~~. Gaura coccinea epilobioides
15050 Oe Simsiana Ser

1 Gaura coccinea epilobioides
2 Oe. laciniata pubescens
3 Penstemon Kunthii Don
4 Oe. tetraptera Cav
5 Lopezia ~~mexicana Jacq~~. racemosa
6 Gaura mutabilis Cav.
7 Penstemon campanulatus (Cav.) Willd
8 Lopezia
9 Oe. Purpusii
15060 Oe. rosea
1 Oe. laciniata pubescens
2 Fuchsia minutiflora ?
3 Epilobium Bonplandianum
4 Oe. deserticola
5 Salvia polystachya Cav.

6 mi W. of
San Pedro, Coahuila Aug. 11

San. Miguel, 5 mi E of San Pedro
Ramos Arizpe, " " Saltillo 12
20 mi S of Monterrey Aug 12
El Limon, near Villa Juarez, Tamaulipas 13
Palmira, 27 mi So of Valles

Zimapan 16

Puerto-aereo on Puebla Road from Mexico City
along railroad, 3 pr.
Tlamanalco Aug. 18

Sacro Monte, Amecameca
Amecameca
Villa Obregon, west of San Angel Aug 20
Summit near Desierto de los Leones

Pass Mex-Puebla 8-25

15066 Gaura coccinea epilobioides
7 Oe Simsiana
8 Gaura coccinea epilobioides
9 Oe. Simsiana?
15070 Oe Simsiana
1 Lopezia racemosa
2 Oe. tetraptera
3. Jussiaea suffruticosa
4 Oenothera Simsiana Ser.
5 Oe. Simsiana no plant,
6 " "
7 Oe. Jamesii "

15078 Castilleja
9 Astragalus inflexus leucolobus
15080 Lupinus concinnus
1 Oxytheca emarginata Hall
2 Gilia inconspicua diegensis
3 Sitanion Hystrix
4 Lathyrus laetiflorus
5 Arabis maxima Greene
6 Cryptantha muricata denticulata
7 Malacothrix Clevelandii
8 Nemacladus longiflorus
9 Plagiobothrys calif fulvescens

Tax melucan 7700 ft. 8-25

Acatzingo
Bosque Chapultepec 8-24
Acatzingo 8-25
~~Cuatlan~~, 16 mi no of Tehuacan

Orizaba 8-27
6 miles west of Cholula 8-28
only seed from garden at Aug. 20
Toluca, ~~State of~~ Mex
only seed, garden at Puebla 8-28
park in Parras, Coahuila Aug. 10
plants 2-m. tall

N.W. slope, Santa Rosa Mt., Riverside Co. 7300 ft May 30 1937

7000

near Vandeventer Flat 5500

15090 Collinsia concolor
1 Cryptantha intermedia
2 Mimulus diffusus
3 Caulanthus Hallii
4 Festuca Grayi ?
5 Mimulus moschatus sessilifolius
6 Eriophyllum confertiflorum tridactylum
7 Penstemon Clevelandii connatus
8 Mimulus
9 Streptanthus campestris Wats

15100 Gilia pungens Hallii
1 Phacelia Parishii Gray white to lavender
2 Cryptantha barbigera
3 Juncus bufonius L.
4 Psoralea calif wats.

5. Gilia densifolia austromontana
6 Stanleya pinnata
7 Ac. micrantha var. exfoliata
8 Eriophyllum Wallacei
9 Salvia eremostachya Jeps
15110 Eriogonum apiculatum Wats
1 Amorpha fruticosa L
2 Sphaeralcea rosacea Munz & Johnston
3 Abronia villosa aurita
4 Monardella nana ~~antha~~

sandy area no of Vandeventer Flat, 5500 May 30

calyx papillose-pubescent, stems hollow
NW slope Santa Rosa Mt 6000
→ with 15092

dry slope among rocks, Anza Tablet
5-31 3500 ft

Shumiway, Pinyon Flats, Santa Rosa Mts. 4000 May 29
damp banks, " " "

blue, dry heavy soil, public camp ground at
Nightingale's, Palms to Pines Highway 4000 ft
Dos Palmas Spring 3600

sandy wash below Anza tablet 5-31 3300

15115 Lotus scoparius brevialatus
6 Chorizanthe fimbriata laciniata
7 Oxytheca trilobata
8 Gilia Matthewsii
9 Echeveria lanceolata aloides
15120 Ribes quercetorum
1 Orobanche Grayana Fendleri
2 Penstemon linarioides Gray var. calif
3. Arabis Johnstonii Munz
4 Orobanche fasciculata
5. Astragalus Antiselli Gray
6. Eriogonum nodosum
7 Galium angustifolium near decipiens
8 Astragalus insularis Harwoodii
9 Lotus rigidus
15130 Juncus xiphoides
1 Sporobolus airoides Torr.
2 Echeveria lanceolata aloides
3 Prunus eriogyna
4 Astragalus inflexus leucolobus
5 Phlox Douglasii austromontana
6 Lotus argyraeus Greene
7 Arabis perennans Wats
8 Astragalus Douglasii Parishii
9 Sphaeralcea ambigua Gray ?
15140 Lupinus excubitus austromontanus
1 " Andersonii Wats

Anza tablet 5000 5-31

dry slope, Kenworthy S. Jacinto Mts 4500

Dos Palmas Spring 3600 5-30

Santa Rosa Peak 7900

15142 Ribes cereum
3 Astragalus Douglasii Parnalud
4 Dalea Schottii
5 Eriogonum inflatum deflatum
6 Salvia Vaseyi
7 Stephanomeria pauciflora
8 Gilia eremica (Jeps.) Craig
9 Penstemon antirrhinoides Benth
15150 Brickellia arguta Robinson
1 Acamptopappus sphaerocephalus Gray
2 Eriogonum molestum Davidsonii Jeps
3 Salvia apiana compacta
4 Penstemon Clevelandii connatus M-J
5 Lotus argyraeus Greene
6 Wolfia Parryi Wats

---

7 Orobanche uniflora Sedi
8 Carex alma Bailey
9 Monolepis Nuttalliana Greene
15160 Atriplex phyllostegia
1. Gilia latiflora Gray
2 Phacelia pachyphylla Gray
3 Le. clavaeformis Torr. Frem
4 Cleomella obtusifolia " "
5 Lepidium flavum Torr
6 Cryptanthe circumscissa
7 Baileya pleniradiata Harv. Gray

Santa Rosa Peak	8000	5-30
NW	7300	
Dead Indian Creek	1500	5-29

Palms-Pines Highway at 3500

Erey Canyon, no of Claremont May 4

alkali flat, 12 mi E of Lucerne V. 3000 May 7

15168 Di Nyraea calif Harvey
9 Stanleya pinnata (Pursh)
15170 Monoptilon bellidiforme T. & G.
1 Gilia ochroleuca Jones
2 " Davyi Milliken
3 Cryptantha ptero-carya (Torr.) Greene
4 Layia glandulosa H. & A
5 Gilia Matthewsii Gray
6 Tetradymia spinosa var. longispina
7. Lycium Fremontii Gray
8 Malacothrix sonchoides T. & G
9 Astragalus lentiginosus var. Fremontii
15180 Malvastrum exile Gray
1 Euphorbia albomarginata T. & G
2 Glyptopleura setulosa Gray
3 Orthocarpus purpurascens ornatus
4 Gilia aurea Nutt.
5. Coreopsis Bigelovii (Gray) Hall
6 Lupinus odoratus Heller
7 Eriophyllum Wallacei Gray
8 Eriogonum pusillum T. & G
9 Salazaria mexicana Torr
15190 Aplopappus Cooperi
1 Dalea Fremontii Johnsoni
2 Encelia frutescens actoni (Elmer)
3 Grayia spinosa (Hook)
4 Lomatium mohavense C. & R

5 mi ~~east~~ of Lucerne Valley 2800 ft May 7

5 mi east of Victorville 2900 "

2 mi e of Victorville

5 mi SW " "

15195 Zygadenus brevibracteatus Wall
6 Eurotia lanata Moq
7 Aster abatus Blake
8 Salvia carduacea
9 Eriophyllum Wallacei Gray
15200 Gilia Matthewsii Gray
1 Chaenactis Fremontii "
2 Malacothrix calif glabrata
3 Caulanthus lasiophyllus
4 Delphinium Parishii Gray
5 Lupinus odoratus Heller
6. Ellisia membranacea Benth
7 Amsinckia tessellata Gray
8 Aplopappus linearifolius var. interior
9 Salvia carnosa pulosa
15210 Castilleja plagiotoma
11 Asclepias erosa
12 Cryptantha pterocarya
13 Ac. dentata Parishii
14 Microseris linearifolia
15 Layia glandulosa
16 Nemophila rotata Eastw.
17 Mentzelia albicaulis

5 mi SW of Victorville May 7

15218 Cyperus esculentus L.
9 Juncus Cooperi Engelm.
15220 Euphorbia Parishii Greene
1 Phragmites communis Trin
2 Scirpus paludosus A. Nels.
3 Sesuvium verrucosum Raf.
4 Distichlis stricta var. laxa Fassett
5 Anemopsis californica Hook
6 Scirpus americanus Pers.
7 Nitrophila occidentalis (Nutt.) Wats.
8 Suaeda Torreyana var. ramosissima
9 Cressa truxillensis HBK
15230 Frankenia grandifolia C.S. var.
1 Ruppia maritima L.
2 Scirpus paludosus A. Nelson
3 Tidestromia oblongifolia (Wats) Standl.
4 Atriplex Parryi Wats.
5 Sporobolus flexuosus (Thurb.) Rydb.
6 Allenrolfea occidentalis (Wats.)
7 Ruppia maritima L.

Saratoga Springs Oct 15, 1937

" "

+Vest

campestris Gray

Kuntze

314-217

15238 De. ~~Hookeri~~ erythrosepala Bobás (from 14314 Anchor Bay, Mendocino Co)
bushy, 1m tall, erect; stems green, with red pustules, hirsute; bracts spreading; leaves lance-oblong stigma-lobes greenish-yellow, 4-5-6 sepals etc gl. Tips spreading
bruised in July 16

15239 (6) De Simsiana (15076, Pueblo)
not keep rosette; stems green, no little pink

15240 (4) De. Simsiana (15074, Cholula)

15241 Hookeri en Hookeri (14304, Tomales B)
stems, fruits, sepals, hyp. reddish
leaves more grayish than 15238
mostly green; sepal-tips connivent
bracts spreading, persistent
stigma-lobes yellow, spreading
bruised in July 16

15242 (6) Simsiana (15070 Acatzingo)

15243 ~~Hamatch~~ erythrosepala Bobas (14510 - Camp
leaves oblong-lanc; stems green
crinkly sepal-tips spread
greenish, spreading
bruised in July 16

garden June 15, 1938

pale
petal ~ yellow, reddish-orange in age

bright green
somewhat crinkled, midrib finely; (in all 3 plants), spreading;

6 dm. tall, erect, branching, bid pustules

like 15239, stems little more

3 plants little over 1 m.
with pustules at least on stems
lanceolate, somewhat crinkled; midrib;
petals orange-red in age
pale yellow

green etc. like 15239, but more vigorous

deep green, erect, bushy, 1 m+.
with red pustules; leaves somewhat
stigma-lobes 4, slightly
flowers few as yet
more added June 28 under same no.

⑥
15244 Hookeri Wolfii (14386 Crescent City
stems red, with pustules
bracts spread hyps with
connivent; petals pale yellow,
yellow spread
fruit in July 16

⑦
15245 Hookeri inigua 14575 Payson, Utah
stems with some red stuppe, no pustules
bracts recurved 3 sepals red,
petals pale yellow, ovate red

fruit in July 16

⑥
15246 ~~Chaenactis?~~ munita (14470 Hood River Va
reddish in upper parts, stri gose,
leaves slightly broader in upper half
petals deep yellow, orange in age
some capsules with little red
fruit in July 18

15247 ~~chaenactis?~~ (14465 Hood R. Va
fruit July 18

⑤
15248 munita (14481 Camas
pustules veins red
sepals slightly red, tips divaricate
stigma green

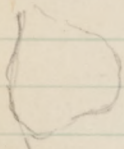
fruit July 18

June 15, 1938

plants 1m branched, erect
leaves grayish, lance
some red. sepals reddish tips
somewhat orange in age; stigma-lobes
capsule with red bands.

bushy, erect much branched 1m —
leaves grayish, lance, somewhat crinkled.
connivent hyps less red
in age. stigma-lobes spread, yellow
capsule with red band

Valley) 1m — stems green,
not muricate; leaf-midribs green
hyps & sepals slightly red
stigma-lobes greenish
bracts spread



Valley) Ictic 15246

1m. stems red, with red
bracts spreading; hyps green

(5)

15249 chenopodiifolia 14512 Grange
erect stems red, stigmas
bracts spread sepals some
some range in age
fruit in July 18

(5) 15250 chenopodiifolia (14468 Bri
fruit in July 18

15251 Jamesii Fig 9 (15077 Parr as
7 dm. tall stem green
lance-ovate

15252 Simsiana (15048
6-8 dm, no rosette

15253 Simsiana (15075
6-8 dm no rosette

15254 Simsiana (15050
no rosette

15255 Simsiana (15067
leaves spreading, rosettes

15256 (15069
leaves spread no rosette

June 15

Inv. grayish foliage, much branched
leaves glaucous type reddish
red, tips spread petals deep yellow
stigma ✕ yellow-green

gen) like 15249

as) VR rosette, erect branched
with red pustules leaves

Zimapan) stems red, some pustules

Toluca) stems red, some pustules

Puerto-aereo) stems green, pustules?

Texmelucan) stems very little red
none

Chapultepec) stems red

(8)

15257 strigosa 14511 cult
muricato leaves wavy, green
hyp onm red sepals same
in age. stigma-lobes greenish
fruit on July 18

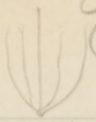
(7)

15258 strigosa 14545 cult
quite red muricato 1 m.
pinks bracts spread
stigma-lobes green, ✱
have fruit

15259 (8) strigosa 14552 cult
have fruit

15260 (8) strigosa 14536 cult
1 m. tall
have fruit bracts spread

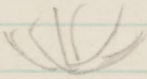
Garden - June 28, 1938



8-9 dm. some red on stems, midribs. bracts spreading
sepal-tips * petals some orange

much fasciation stems
leaves not wavy, midrib slightly
hyp red sepals red tips connivant
petals orange in age

cult much like preading in
every way

stems red  much branched

hyp + sepals red sepal tips conniv
stigma lobes green, mostly spreading

(10)
15261 . flecticaulis Gates
stems red, muricate, veins mostly
hyp green; sepals green, reflexed separately,
capsule long ? petals

(9)
15262 Lamarckiana x brevistylis
green, muricate leaves not very
coarse red, bracts persist. 2 plants with
1 flower with normally long style
& fertile

(2) 15262a = normal styles

(3)
15263 angustissima gubernensis Gates
1 - 1.5 dm. stems deep red
hyp green sepal green, tips
sulphury in age
bracts deciduous
capsules slender, shiny ?

(3)
15264 sackvillensis three plants
gicte senescent, especially on sepals
leaves very crinkled
bracts [illegible] persist
stigma-lobes greenish, semi-connivent

July 10, 1938

3 plants, quite alike — 6-8 dm

green, bracts spread, persistent

free tips stigma yellow.

red at apex green

quite yellow red in age

3 plants compact 15-18 dm stems

crinkly veins green. hyp green.

style short = hyp or less, stem.

stigma yellow petal pale

not red nor orange

in age

3 plants, alike open, loose,

leaves slightly wavy vein red

scarcely connivent petals golden,

in one with erect stigma-lobes

plant on other with spreading " "

quite alike 7-8 dm

affected by aphids + mildew

stems, veins, hyp, sepals all green

sepal-tips partly connivent fast free

petals quite yellow, orange in age

(10)
15265 grandifolia Gates 4 plants stems, sepals green, tips fuc. leaves deep yellow, orange in age stigma green

(8)
15266 Hazelae parviflora Gates 3 plants stems reddish nutlets no persist hyp + sepals slight red hairs hairy ∩ Buck

(12)
15267 novae-scotiae Gates 3 plants all bushy branched from base, 1 in. tall stems red

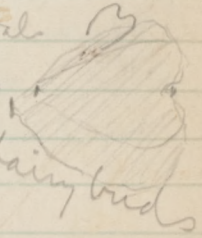
(7)
15268 bifurciflora cruciata Gates erect stems slight red leaves plane. bracts spread sepal-tips connive

(bifurciflora proper, not yet in

(8)
15269 parva Gates 3 plants stems sprawling + slender erect some red in sepals + ovaries bracts spread, persist

bushy
open spreading 1 m. stems, hyp
not wavy, hairy bracts spreading, leafy, persist
connivent capsule long

quite alike erect 6-8 dm
leaves not wavy bracts spread,
petals deep yellow orange in age
stigma green



2 alike with small fls, petal
1 diff " larger " "
" with long hairy buds

3 plants alike 1 m
veins green stems leafy
persist, hyp, sepals green
petals stigma yellow-green
fruit)

with branched rosettes some
3-5 dm green, muricate
sepal-tips separate
stigma greenish petals

(8) Gates

15270 Victorini parviflora
6–9 dm. high green throughout
sepal-tips slightly divaricate
petals

(8)
15271 Machridae (14551 cult Corral Creek)
3rd branched from
stems green & little red
green veins hyp green &
tips connivent stigma
yellow

(5)
15272 Machridae (14415 Williamson Riv)
with 2 weak stems other partly
stems mostly green, muricate
connivent
spread, persist

3 plants branched from base, except for little red in stems stigma greenish, spread bracts persist

July 16 —

3 plants, 2 still in rosette base semi-erect 8-9 dm muricate; leaves wavy with reddish cone ged glandular yellow spread petals pale capsule green ?

2 plants (1 mostly in rosette (quite a lot of fasciation) rosette partly stems up to 1m hypo ? sepals slight red, tips stigma yellow spreading, bracts capsule green ?

(B)
15273 ornata (14546 Boise)
branched from base, hairy, not
(no red) tips erect. petals pale,
stigma yellow spreading
bracts spreading, persistent, wavy
hairy, green

(B)
15274 strigosa (14561 Polson)
stems green muricate
leaves green, plane Hyp & sepals
petals red in age
capsules bracts spread

15275 strigosa Mack & B (14569 Helena)
in stems

15276 " Mack & B (14571 Livingstn)
lateral branches stigma

15277 " Mack & Busby (4555 Lima)
stems Quite red

July 16

3 plants, all well developed
spreading 1–1.5 meters, green
muricate hyp + sepals hairy
reddish in age

leaves flame capsule

3 plants scarcely 1 m

some red hyp slight divarcate
stigma green ♂ some red ♀
persist

latter 15274 but more red
stigma ♀

3 plants 2 in rosette
3rd in rosette with 2 or 3 weak
green ♂ stems muricate

4 plants 2 in rosette
2 " " & erect
branches 4 dm

(3).
15278 longissima form
sent by D.W. Clokey
branched freely, 8-10 dm
wavy hyp. red sepals red
stigmas green (yellow) with
bracts persist recurved - sp
capsule

(4).
15279 insignis Bartlett from Sask.
1 plant alive, partly branched
3-5 dm. long, soft-hairy, some
sepal-tips connivent
stigma greenish

(6).
15280 (bet cherad. v stygna) 14536
1 m. high stems Fruitland, Ida
bracts spreading - recurved, slender, reds
red, sepal-tips scarcely spreading.

(8).
15281 near cherad 14527 cult
Kennewick
stems red, stiff, muricate
petals golden, scarcely orange in
bracts spreading - recurved, persist

July 18-1938

seed from Charleston Mts. Nev.
plants 1½ ft high large rosette
leaves green, not
tips connivent petals deep
spreading lobes. yellow orange in
reading age

July 21

rosette, partly decumbent branches
ed on stems hyp & calyx green
slight orange in age
bracts leafy, spred persist
leaves not wavy (stingosa)

3 plants, much branched from base
leaves, wavy midribs green
partly persistent, hyp & calyx some
what pale yellow greenish
orange in age.

3 plants 1-1.5 m.
hyp & sepals green, lips by
age greenish
leaves scarcely wavy

(3)
15282 stygiana — seed from above
2 plants, stalk in rosette with
no red, petals orange

(7)
15283 stygiana? — 14548, Heyburn
branches erect, simple almost 2
minicate little red under each
bract spoad-recurved, persist
petals golden, orange in age

(6)
15284 var stygiana or — 14578 St.
cheradoph — Anthony
out, 1.5 m. tall, stems rather
leaves wavy hypo + sepal some
bracts recurved - spread
petals orange in age

(8)
15285 stygiana — (Hasleett, Manitoba)
rather simple
erect green coarse, ridged
hypo / sepals green
stigma greenish
fruit very crowded

July 21, 1938

of Yellowstone Lake in 1936
fed. weak branches 2–4 dm
in age

3 plants, branched at base, three
meters tall, green, stout ridged, some
bract. leaves wavy
hyp. & sepals green, tips
stigma green fruit long

1 plant, branched at base & three-
slender some red on finer twigs
red, tips connivent fruit short
stigma green-yellow

3 plants, branched at base, stems
almost 1 m. tall, leaves glaucous
tips connivent petals deep yellow
bracts recurved-spread orange

(10)
15286 niagarensis Gates
(near nutans)
pure red in stems leaves plane
sepal-tips convivent or not
petals
stigma green
bracts deciduous
capsule shining
or larger
in all parts

(8)
15287 Roy-fraseri Gates
pure red in stems leaves
hyp & sepals green, gl.
bracts spread persistent
ovaries muricate

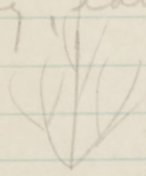
(6)
15288 biformiflora gates
ovaries not muricate, but

(10)
15289 Hazelae gates cult. Gatesend
(Lockport N.Y.)
bare throughout 1 m tall
stems slight red leaves not
but fairly convivent
stigma erect greenish
main stems aborting near
several of smaller branches
hyp & sepals green

July 21, 1938

3 plants 1½ m

, no red; bract & sepals green
golden slight orange in age
in same plant
spreading, lanceolate



3 plants 1⅓ m. tall
flame green veins
sepal-tips convivent
some orange in age
deep yellow
green-yellow

much like 15287, but
hairy

Aug 1, 1938 3 plants, branched

bracts persist, spreading - recurved
wavy sepal tips not terminal
golden, sulfury on drying

end & exceeding bg

(10)

15290 deflexa var bracteata Gates

3 plants branched at base
stems pinkish angle green, leaves plane
deflexed hyp + sepals green
stigma green ♀ style varies
flowers not opening up

15291 laevigata var similis Gates

3 plants (1 mostly rosette—
rosette, all rather weak - stems
to be decumbent or flopping
bracts persist, spreading -

(3) A - sepal = lips ⊃⊂ on 1 plant flowers

(6) B - " " ✕ on 2 plants
" flowers

- petals of all slight orange in

(10)

15292 - Victorini undulata Gates

branched at base + each
leaves somewhat wavy
petals pale ( ) sulphur - vary
bracts tend to) feel, spread

Aug 1

(Gates seed, Windsor, Ont., cult.)
branches erect, simple 2 m. tall
hairs persistent spreading —
petals pale, slight orange on fading
in length.
wide

(Gates seed, St. Valier Quebec)
with 2 or 3 laterals, these out of
stems red up 1 1/2 in ending
over) bright clean green leaves
received, very few capsules
with semierect stems & petals
do open
" rosette & floppy stems & petals
tending not to open
age

(Toronto) 3 plants, 1 1/2 m
branch somewhat branched above
stems green hypo & sepals green
ge in age sienna green spreading

(8)

15293 albinervis Gates (Barrie N.
coarse, 1 - 1.5 m branched
grayish leaves slightly
stigma green ✗ petals
hairs persist, leafy

(2)

15294 deflexa Gates (Colchester, Ont.)
rosettes few stems weak
1 with fls stigma green

(10)

15295 leucophylla Gates (St. Valier,
throughout upper stem hyp
green ✗ petals nails, slightly
leaves not wavy.

15296 jaratanarckiana
bare, almost 2 m. tall
no red in plant except
sepal-tips ✗ stigma green
hairs deciduous

15297 longissima (15009
leaves flaccid practically no
sheping yellow ✗

petals pale yellow, very slightly

Aug. 1

Dale, seed prop Gates) 2 plants
at base, br branches fairly simple
wavy, hypx & sepals green
golden, ginte red in age

) 2 plants both mostly branching
prostrate, ending in rosettes
nearly strigose

Gne) 4 plants 1 m. branched
sepals red-muricate
bracts persist, spreading
reddish in age

3 plants, branched at & near
leaves broad, sharply crinkled
muricate & near stem-tips
petals golden now red in
age

1½ m erect, branched freely
red sume muricate
bracts
red in age

15298 fycnocarpa (seed from
almost 2 m. tall, very little
stigma green ♀ ♂
petals some orange-red in age
quite badly mildewed

15299 eriensis. (Colchester,
somewhat grayish, leaves
petals golden, red in age
heads spread, persist

15300 rubricapitata (Barrie, N.
only at inflorescence
flame, pink-veined hyp green
sepals red in upper half
stigma greenish

15301 subterminalis
stems angled rather green
leaves slightly wavy
capitate stems golden orange

15302 ammophiloides Laurentian
pressed, stem weak, green
above, hyp & sep red

Aug 1, 1938

(Gates) branched freely, erect
red capsules shiny
bracts persist, spread
leaves flame flowers old

(Ort) branched freely, 2 m. tall
flame, stigma yellowish

petals erect

Dale) branched at base, stem
stems reddish in angles, leaves
so is fruit fruit shiny
petals deep yellow orange in age
bracts shed

branched at base mostly, 1½ m
bracts tend to shed
buds angled stigma green
in age

sis linearis upper half of plant
smooth, red-mucronate

1 plant

Aug 6 - 1938

15303 elata HBK Sinsiana (chapultepec) (15069 cult
anth. ovaries with little red, hyp
yellow, quite red in age, style less
stigma yellow + fruit few

15304 elata HBK Sinsiana (Texmelucan) 15067
not much red

⑤ 15305 Sinsiana (15076 Puebla)
stems, hyp, sepals quite green

⑤ 15306 " 15074 (6 mi W of Cholula)

⑥ 15307 " (15050, Puerto-aereo)

⑤ 15308 " (15075, Toluca)
fls small, plant old,

⑥ 15309 " (15048, Zimapan)

sepals ~~some~~ sepals some red

plants old flowers small
in all here

1.5 m / erect stems red, sepals green until old; petals pale
leaves lanceolate, reticulate-veined
than petals

about like 15303, but stems

styles = petals

little red in upper stems
styles = petals
some red in stems
set fruit better

stems quite red
style less than petals
very little fruit

15310 elata ssp. (15070 Arcata)
in fact, few buds develope

Sinsiana does not have so
conaceous, ngrd.

15311 Hookeri irrigua (15039 San Pedro)
stems, sepals, ovaries
style, shorter, than petals

15312 ~~Hookeri irrigua~~ ~~elata ssp.~~ (15042 San Miguel)

15313 Jamesii T.9 (15077 Parras seed)
throughout except old fading
corolla pale, aging orange-red
style scarcely = petals
stigma yellowish

15314 Hookeri var. ~~virgata~~ angustifolia gates (15016 Dinosaur)
some red on stems, hypn, calyx

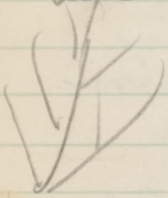
Aug 7

quite green ~~set s. fair~~
mostly abort

many slender branches, bracts

2 m. tall some red in
petals pale red-orange in age
sets fruit

lupe 15311



1.5 m. green
hyp x corolla.
stem some muricate

1m freely branched

④.
15315 *sluzjora* (Heber 15013 cult)
Prin main axis 1m w sev branches

⑥.
15316 *sluzjora* (Leonard N. Dak seed by da Stevens)
several short prostrate branches one 1m long and me. flowers deep yellow, orange w bracts broad, pointed, wavy

15317 " (Fargo N. Dak Stevens seed)
erect rather simple stems fls etc like 15316

15318 *mucata*? 14411 Central Point, Ore
3 plants branched freely others erect, simple, 1.5 m high green, petals deep yellow, orange-brown bracts

Aug 7-38

plants had good rosettes, rather weak, few small bracts very wavy

second year - plants with ending in rosettes & other decumbent suberect freely branched, 1 m tall. age stigma greenish ♀ or ♂

plants, br at base & with 1-1.3 m. leafy

second season

from base some stems prostrate mucate green except above red, glandular red in age stigma ♂ green

15319 Bromus carinatus H & A
permist, pendant moist place

20 Fragaria calif C. S

21 Stachys rigida Nutt.
pale lavender

22 Carex Tenerasformis M. clumps

23 Agrostis exarata Trin

24 Juncus oxymeris Engelm.

25 " mexicanus Willd

26 Muhlenbergia squarrosa Rydb dense soddy

27 Carex —

28 Lotus Davidsonii Greenprostrate

29 Silene Parishii Wats

30 Gilia pungens Hallii Milliken

31 Carex Douglasii Boott

32 Aster violet canescens Pursh

33 Eriogonum apiculatum near Parishii Wats

trip to Santa Rosa Mts
with Carl Epling Aug 13, 1938

Cedar Spring, north base of Santa Rosa
Peak at about 7500 ft.

patches

semi dry banks . . .

rocky crest of ridge near S.R. Peak.
7800

sandy rather dry slope 7600
frequent on dry ridge "
& slopes

sandy places "

15334 Galium Parishii H. H

335 Artemisia Ludoviciana Nutt

6 Solidago Calif. Nutt.
7 Corethrogyne filag bevicula
8 Eriogonum nudum pauciflorum Wats
Wheeler
9 Bahia dissecta (Gray) Britt

15340 Chenopodium Fremontii Wats.

1 Carex ~~praegracilis W. Boott~~ alma Boott
2. Solidago Calif Nutt.
3 Castilleja stenantha Gray
4 Lupinus latifolius Parishii Sm
lavender clumps 1½ m
5 Juncus xiphioides Mey
6 Salvia pachyphylla Ep
7 Muhlenbergia squarrosa (Trin.) Rydb.
8 Carex ~~Careyana~~ Veneralformis Mack.
9 Agrostis exarata Trin.
15350 Elymus glaucus Buckl.
1 Juncus bufonius L.
2 Gnaphalium palustre Nutt.
3 Mimulus moschatus Dougl longiflorus

Aug. 13

frequent dry rocky ridge east of Santa Rosa Peak 7800

"

"

"

"

occasional

edge of meadow, Virgin Spring 7500 ft 8-14

clumps along stream "

meadow "

"

"

tall "

dry slopes "

meadow "

" "

"

" (sandy patch) "

"

"

15354 Mimulus guttatus DC.

55 Mimetanthe pilosa (Benth.) Greene not flans
56 Bromus carinatus H. & A
57 Stachys rigida Nutt top of panicle drooping pale

58 Trifolium monanthum Grantianum Zeile
59 Polygonum Douglasii Johnstonii Mung
60 Gayophytum Nuttallii T. & G.
61 " hairy, 1 plant seen

15362 Malvastrum fasciculatum pink
rounded, many branched 1-1.5
Santa Rosa Peak to Pinyon Flats

63 Salvia pachyphylla Epling
ridge east of Toro Peak

64 Bahia dissecta Britt
65 Monardella nana tenuiflora
66 Carex alma clumps
67 Juncus effusus pacificus
68 Sambucus velutina D. C.
berries white

Virgin Spring 8-14
meadow "
edge meadow "
" "
in "
in "
edge "
"
"

m tall common on road from
at 5500 ft.

single albino plant on high
at 8000

ridge east of Toro Peak 8000

edge of spring " " " 7800
(head Black Rabbit Canyon

no-NW-facing slope near spring

15369 Cordylanthus Nevinii Gray
70 Pirola aphylla Smith

15371 Salvia apiana × pachyphylla
corolla pale violet, lower lip erect
plant very sticky
with S. pachyphylla

72 Garrya flavescens palleda

73 Re. calycina

74 Eriogonum nudum pauciflorum Heller
75 Amorpha calif. Nutt
76 Arctostaphylos Parryana pinetorum
low spreading
77 Eriogonum umbellatum stellatum
78 Penstemon linarioides calif
79 galium angust pinetorum M. J rocks
80 Monardella linoides Gray
81 Linum Nevinii Pursh
82 Hymenopappus lugens Greene
83 Corethrogyne filag breviscula Canby
84 Erioq Wrightii subscaposum Wats
~~85 Calochortus fruit~~
86 Chrysothamnus
87 Galium angustifol pinetorum M. J

8-14

dry slope, under pines near above spring

" " "

single plant on ridge east of Toro Peak at lower edge of yellow pine about 7500'

ridge E of Toro Peak 7500

flinty " "

under pines

ridge lower edge pines

" "

under pines

flinty ridge "

under pines "

" "

" "

" "

" 8000

" "

" "

15388 Gutierrezia Sarothrae
89 Penstemon
90 Castilleja
91 Draba corrugata saxosa M. & J.
92 Philadelphus serpyllifolius Gray
low, intricately branched

15393 Jussiaea longifolia typica
herb, 1m+ in brushy swamp
94 Scroph[2].
fls brick-red; mottled herb up to 8-10dm.
95 Jussiaea leptocarpa genuina
erect very bushy, 1m+
96 Jussiaea leptocarpa genuina
erect, open, 1.5 m.
97 Jussiaea elegans Typica
bushy, 1½ m.
98 Jussiaea myrtifolia Camb.
rather woody, erect, branched, 1½ m.; bracts equal
99 Melastom
Shrub 2-3 m., erect. petals white, sts. orange
15400 Jussiaea suffruticosa sessiliflora
shrubby, 1½ m.
15401 Melastom.
erect arborescent shrub 2-3 m. tall
fruit green to reddish to blue-black

8-14

ridge east of Toro Peak 8000

" "

no facing slope, east " " 8000

about rocks, " " " 8000

Villa Clementina, São Paulo, Brazil Jan 4, 1939

~~calyc~~ hyp × capsule sharply 4-Ld (3)

grassy slope. (2)

(2)

brushy swamp

(3)

" "

(3)

"

Represa de Santo Amaro, São Paulo. Jan 3

hypanthium in water. (4)

(3)

swamp

low wet ground, Morumby, S.P. (3)

15402 Jussiaea myrtifolia Camb.
suffruticose
herb, decumbent. bracts long narrow
fruit not sharply angled
3 Jussiaea suffruticosa sessiliflora Hasskl
young plant in filled-in low sandy soil, brushy
4. Melastom
weak shrub, 1½ m fls white
5 Jussiaea myrtifolia Camb.
slightly ~~suffr~~ woody at base, branched, ascending
6 Jussiaea myrtifolia Camb.
holes in sedgy swamp, herb 2-8 dm, ascending
7 Jussiaea elegans Camb. var. typica Miq
3-10 dm. tall ~~herb or shrub~~ herbaceous ~~branched~~ 3-10 dm. Br branches ~~3~~ dm
or shrubby & erect, in brushy swamps
8 Jussiaea sericea Camb. var. genuina Miq
shrub, 2 m. tall.
9 Jussiaea myrtifolia Camb.
much branched herb 5 dm. tall.
15410 Jussiaea longifolia DC. var typica Hasskl
herb, winged erect branched stem 1 m+
15411 melastom.
low weak shrub 1½ m.
12 —
purple fls - suffruticescent
13 Jussiaea elegans typica
14 " longifolia typica
15 Fuchsia
shrubby, ~~liane~~ to 6 m.
sepals rose, petals purple, stamens + hyp

Morumby, São Paulo Jan. 4, 1939 (5)

3

5 dm tall.

2

low grassy prairie (8)
Butantan, São Paulo Jan 2
" " (4)

6

sprawling on open banks

6

in swamp.

4

6

Morumby, low moist fl Jan. 4

2

2

2

2

sedgy swamp
Alto da Serra, state São Paulo Jan. 3. 8
2500 ft.

rose

15416 Scrophularia
herb, branched, 1 m.

15417 Jussiaea elegans typica
coarse herb, ~~decumbent~~ sprawling over ground, much branched; or

15418 Utricularia
yellow

19 Jussiaea mystifolia Camb.
quite shrubby fruit not sharply

20 Jussiaea mystifolia
erect herb in small ditch.

21 ~~Jussiaea~~
perennial herb with creeping branchy stems

22. Jussiaea. mystifolia Camb
somewhat woody, erect, . bracts linear-lance
stamens unequal

23. Jussiaea suffruticosa sessiliflora
erect bushy herb. bracteoles squamate

4 Jussiaea. uruguayensis Camb. genuina
floating stems glabrous with obovate leaves;
fls. deep yellow

5 Jussiaea
erect herb in swamp

6 Jussiaea leptocarpa Nutt
deep yellow.

7 Jussiaea nervosa Poir. typica Mury
erect shrub, 1½ m;
pale yellow

8 Jussiaea mystifolia Camb
branched semi-shrub 9-15 dm. deep yellow

Alto da Serra Jan. 3.

"

in ditches, etc. × decumbent to ascending.

Villa Anastacio, S.P. Jan. 6
pool

angled

low wet places.
× some erect branches; flowers purplish-red

, roadway; swamp.

edge of swamp.
shallow pools.
erect stems ~~glabrous with oboovate~~ hairy with lanceolate leaves.

edge of marsh.

Pinheiros Jan. 9.

15429. Jussiaea suffruticosa ligustrifolia
herb with winged stems, 1 m. tall
30 Jussiaea suffruticosa var. sessiliflora (Mich)
erect branched herb 6-8 dm.
31 Jussiaea suffruticosa L. var. ligustrifolia (H.K)
erect branched herb 1 m.
32 Jussiaea linifolia Vahl.
erect branched herb 5-8 dm.
33 Jussiaea natans H.B.K.
fls. white, with yellow spot at base of each petal. floating plant
34. Rubiac
semi-shrubby, white 6-8 dm.
35 Jussiaea leptocarpa Nutt. Ayacucho
shrubby, much branched, 1 m., fls. small, y
36. Jussiaea suffruticosa sessiliflora
freely branched, perennial herb. 6-9 dm. tall
37 Jussiaea longifolia DC. Iquitos
perennial herb, erect, simple below, open & bran
38.
fls. purplish red
39 Jussiaea suffruticosa sessiliflora
40 Jussiaea suffruticosa "
erect herb, 6-8 dm
41 Oenothera indecora Camb.?
fls. almost white

Botanical Garden Rio de Janeiro Dec 24, 1938 2
spontaneous. in ditch

(Mich) Hassler 6

(Ark) grisebf. " in ditch
" f. linearifolia (Hassl.) wied. 2

" 6

cultivated " 3

Barro da Tijuca Dec. 23. 2
edge swamp back beach

6

yellowish

4

6

ched above, 1 m or more tall; stem winged.

2

Avenida Niemeyer 2
1 kilometer from Joa, Rio de Janeiro
hillside seep, Gruta da Imprensa 6
Rio

sandy flats, Carrasco, Montevideo Jan 19, 1939

15442 Carey

3 Epilobium brasiliense Hausskn.

4 lavender

5 Jussiaea uruguayensis Camb. erect

6 " uruguayensis almost prostrate

7 " "

8 " "

erect herb with fleshy stems

9 Oenothera indecora Camb.

erect branched, 5 dm tall.

15450 Jussiaea longifolia major Mich.

erect, 1+ m.

1 Oenothera longiflora L.

fleshy

2 Jussiaea repens montevidensis (Spreng)

very glandular

3 Jussiaea elegans intermedia Hassler

erect, 1–1.5 m.

4 Jussiaea

fls. soft creamy yellow; herb 1.5 m. tall

5 Oe. ~~grandiflora?~~ Ait. suaveolens Desf?

6 Lathyrus paranensis

purplish-blue

7. Lathyrus Parodii Burkart

purplish blue herb 1 m

8 Jussiaea

perennial herb 1+ m.

9 Jussiaea bonariensis Mich. erect branched herb 5–12 dm

flo golden

clumps, swamp, Carrasco, Montevideo, Uruguay 2
Jan 19, 1939
edge " " " 4
swamp " Jan 22, 2
" " " 22 2
in sand " " 1
bank of small stream " 19 4
dried swamp " 19 4
apparently annual; sandy flats
Carrasco 19 4
4
swamp " 19
sandy flats " 19 2
dried pond, Toledo, Montevideo 20 4
damp places, Palermo, Buenos Aires 2
24
low places, near Progreso, Delta Bs. 2
Jan 30
Bot. Garden, Fac de Agron, BA Jan 25 2
Progreso, Delta, Bs. 1-30 2
" " " " 2
Catalina " " " 2
" " " 6

15460 Oenothera affinis Camb
Busby erect, 7 dm

15461 Euphorbia hirtella Boiss
annual, erect herb

2 Euphorbia hirtella Boiss
prostrate

3 Oenothera elongata Rusby
erect herb, simple or branched, about 8-10 dm.
tall.

4 Oenothera ~~affinis~~ Parodiana?

5 " ~~affinis Camb.~~ Parodiana? damp

6 " affinis Camb.

7 " campylocalyx Koch & Bouché
steep roadside in lower Andes,

8 melastom

9 Fuchsia boliviana Carr.
shrub 2-4 meters; fls. cardinal-red.

15470 Oenothera elongata Rusby
single plant, edge of cornfield

1 Jussiaea peruviana L
herb 8-10 dm.

2 Oenothera ~~affinis~~ Parodiana?

3 Jussiaea repens ~~var~~ leptoides

4 Euphorbia hirta L.

5 Fuchsia boliviana Carr.

6 Oenothera affinis Camb. among rocks

7 Jussiaea ~~repens leptoides~~ grand. shallow

8 " ~~bonariensis~~ Micheli roadside

Palermo, Buenos Aires, Argentine Jan 24 4

orchards, Catalina, Delta. BA Jan 30 2

Raco, near Tucuman, Argentine Feb 11, 1925 2

garden weed, Villa Nougués, Tucuman. 8
3500 ft. Feb. 9.

" " " " 2

Raco, foot of Andes above Tucumán Feb. 11

" " " " "

Las Lenguas al Clavillo, Depto. Chicligasta,
Tucumán 5500 ft. Feb. 13 8

grassy slopes, Villa Nougués 3500 ft Feb 9

woods " " " "

Siambon, near Tucumán 3000 ft Feb. 11

2

edge of fields 4

small stream 4

erect 2

Las Lenguas al Clavillo 1

Rio Cochuna, Depto. Chicligasta 3000 ft 4

pools, Famaillá, Tucumán Feb. 13 4

swamp, " " " 4

15479 Jussiaea bonaraensis Micli

80 " peruviana L.

81 Franseria Meyeniana Sch. Bip.
low spreading shrub 3-5 dm.

82 Baccharis glutinosa Pers ?
shrub, 1.5 m. tall

83 Oenothera verrucosa Jtn

84 fern

85 Phacelia fls small, white

86 malvastrum capitatum (Cav.) Gusel.
lavender, ~~woody~~ somewhat woody, 3-10 dm.

87 Verbena

88 pale yellow Encelia canescens Lam. woody at base, brittle, 4-5 dm

89 ~~Comp~~ Viguiera Pflanzii Perkins
woody at base; 5-7 dm. deep golden yellow

90 Le. rosea Ait.

91 ~~Comp~~ somewhat woody, dense clumps 1-1.5 m. Baccharis glutinosa Pers.

92 Grindelia and Tessaria integrifolia R.&P
low rounded clumps, 8-12 dm.

93 Lepidium chichicara Desv.
succulent perennial; fls. whitish

94 Baccharis 2 meters

95 legume Adesmia argyrophyllum Meyen
shrub, 1 m.; fls. yellowish with purple-brown veining

Famaillá, Tucumán 2/13 1

" "

sand-bar, Rio Chile, Tingo, Arequipa, Peru
at 7500 ft. March 8, 1939

sandy wash, Quebrada de San Lazaro, Arequipa March 10
at 8500 ft.

rocky slope at 8500 "

sandy wash 8500

sand bars, Rio Chile, Tingo, Arequipa 7500 March 8.

(x)

4

along ditches 4

sand-bars, ditches, etc. 2

4

sand-bars

" 4

" ditches, etc. 4

edge of wash, Quebrada de San Lazaro 4
March 10 8500 ft.

15496 Solanum

low shrub, 6-8 dm.

97 Caryophyll

98 ~~Compt~~ Diplostephium Meyenii Wedd.
low shrub, white fls
3-5 dm

99 fern

15500 "

1 Parietaria sandy wash,

2 Calceolaria clear yellow
shrub 2-5 dm

3 borage suffrutescent perennial
with spreading stems 3-5 dm. long blue

4 Qe. rubida Rusby
perennial
woody at base, much branched, 5-10 dm.; root
cinerascent; orange-red in age. immature

5 Euphorbia minuta Phil. prostrate annual

6 Bowlesia

7 fern

8 shrub 4-8 dm

edge of wash

9 aromatic shrub 8-10 dm

corolla pinkish without, limb white

15510 —

11 Epilobium denticulatum macropetalum Sam
deep rose-lavender

12 grass

13 ~~Compt~~ Coreopsis

14 malvastrum gerculatum (Cav.) Hochr.
shrub
low shrub, 3-4 dm.

petal pale with purple base

15 Baccharis Feuillei DC. shrub 1-1.5 m.

16 Calceolaria
low spreading branched herb; fls. cream

rocky slopes, Quebrada de San Lazaro, Arequipa 8500 ft March 10 2

" " 2

dry slopes, edge of wash 9200 ft 2

base of rocks, steep slope 8500 2

" " " 2

shelter of rocks 9100 2

~~dry rocky banks~~

dry rocky banks March 11 4

loose slopes 8400 " 2

with yellow tube

sand-bars, Rio Chile, Tinigo, Arequipa March 8 9500 ft. 8

3-4 cm. thick

seeds deep red 3-11

sandy banks, edge of wash, Q. de San Lazaro 9100 2

sandy wash, shelter of rocks, 9100 2

rocky walls, 9300 4

9500 2

rocky slope 8500 2

prostrate 2

damp cliffs, canyon de Rio Chile 4

power-house, Arequipa 8300 ft. 3-13

dry slopes, 8000 2

" " 2

" 4

wash Q. de San Lazaro 9900 3-11 2

loose gravelly edge of wash 9800 ft 2

15517 Solanum — suffrutescent 3-5 dm! violet

8 Lycium — deep purple

large rounded shrub 2 m. tall; leaves fleshy

9 ~~comp.~~ Senecio — shrub 5 dm tall

15520 scroph — suffrutescent 4-8 dm

fls bright scarlet

1 Phlebiophragmus macrorrhiza (Muschl.) O & Sch.
Cruciferae — white

2 — shrub 1 m. — fls greenish yellow

3 Caryophyll — stellaria apetalica (L.) Scop. — prostrate herb

4 Lupinus — perennial

rich purple with deep yellow spot in banner

5 scroph. — lower lip yellow

6 Trixis — low shrub, 5 dm

7 Ce verrucosa Jtn.

8 Ce. verrucosa — single plant, loose slope,

9 Ce. rubida Rusby

15530 Oxalis — bright yellow

1 Convolvulus

2 " — dry sandy slopes

3 Descurainia Perkinsiana Muschl

4 shrub — shrub 1 m. tall

5

6 parasite — scarlet,

7

8 Ceno rubida Rusby

9 " campylocalyx K & B

15540 " verrucosa Johnston

Quebrada de San Lazaro, ~~Arequipa~~	8000	3-10	2
sandy wash	10,000	3-11	2
dry slope	9200		2
	10000		4
dry flats	9100		2
dry bank, edge of wash	9500		2
white fla. dry slopes	10 000		2
sandy bar in wash	8 500		2
1 plant, dry slope	9800		1
dry slope	8000		2
dry slope	9000		1
edge of wash	9600		1
send-bar in wash	9200		6
dry banks	8400		2
~~sandy flats~~ shade of bushes w cac'	8		2
Quebrada de Rio Chile	8000	3-13	4
weed near ditch "	8200		2
dry slope "			4
low ground			2
on apple trees	8300		4
vine			2
near ditch	8300		4
edge irrigated field, Chiguata,		3-29	4
20 km. east of Arequipa	8000		
dry slopes near Chiguata			6

15541 Oe. campylocalyx K.B

2 " multicaulis K.P. prostrate perennial
yellow, diurnal

15543, Oe. campylocalyx K.B yellow in age

4 Epilobium rosy lavender

5 Oe. campylocalyx edge of fields
bet. Cuzco &

6 Oe. campylocalyx near elongata orange-red

7 Jussiaea. 1 m; wet place

8 Fuchsia 3-5 dm; sepal scarlet;

9 Oe rosea Ait.

15550 Prathyrotes annua

0 Larrea divaricata Cav.

2 Prosopis low, 2 m.

3 Hoffmannseggia falcaria

4 Diplolaelia angustifolia cuspidata Gray?

5 Lesquerella Fendleri (Gray) gates limestone

6 Oe. tubicula Gray " 5mi

7 Lesquerella Fendleri limestone

8. Oe Hartwegii Benth. typica "

9. Vicia "

15560 Gaura odorata Lag "

1 Oenothera Hartwegii Fendleri Gray "

2 Prosopis shrub, 2 m.

3 Oe. serrulata Drummondii flava

4 Oe serrulata Drummondii flava

5 Larrea

dry slopes above Cuzco, Peru 6
12000 ft March 25 8

along ditch, Ollantaytambo 9000 3-25 4
" " 6
above Quebrada de Pacar, 11500 3/24 8
Ollantaytambo
ruins of Macchu-Picchu 8500 3/24 4
banks of Urubamba River, 7300 3/25 1
; petals of scarlet, on walls at M-P. 8500 3/24 1
M-P. Station
ruins " 1
sandy flat, 29 Palms, San Bdno Co, Calif April 25 0

sand dunes
dry flats, heavy soil
Sabinal Tex 4-18
dry flats, 5 mi no. of Alpine, Brewster Co, west Texas 4-20 2
W Roswell, N. Mex 4-22
" 1
10 mi W of Uvalde, Tex 4-19
"
near Sabinal, Uvalde Co. Tex 4-18 2
Sanderson, Terrell Co 4-18 6
Langtry, Val Verde Co Tex 4-19 2
East Bernard, Tex (40 W of Houston) Wharton Co 4-19 2
Harwood, " Gonzales Co 2
Langtry 4-19 2

15565 Salpichroa rhombordea Miers
6 Chenopodium carinatum
7 Solanum villosum

68 Ge. Hookeri var. venusta (Bartlett) ined.
69 " " "
15570 Sedum niveum cultivated

1 Linaria dalmatica (L.) Mill. on edge of
2 Brassica arvensis (L) BSP
3 Gastridium ventricosum (Gouan) S. & Thell.

Trip to Borrego Valley —

15571 Chorizanthe procumbens albiflora Goodman
2 Layia platyglossa (F. M) Gray
3 Lotus strigosus (Nutt.) Greene
4 " hamatus Greene
5 Mimulus punicens (Nutt.) Steud
6 Lathyrus strictus Nutt
7 Clematis pauciflorus "
8 Oxalis calif (Abrams) Knuth
9 Cheilanthes " (Nutt) Mett
15580 Nothalaena Newberryi D C Eaton
1 Hibiscus denudatus Benth
2 Mimulus Bigelovii Gray
3 Hyptis Emoryi Torr.

Claremont, orchard weed Oct. 9, 1939
" " " 9 "
" " "

1 mi no. San Onofre, San Diego Co. 6-23-1938
San Juan Creek, 1 mi below Capistrano, " "
Orange Co. 1938

of Vista, S. Diego Co 5-12-1938
so. of Chino 5-12 - "
" "

March 17-18, 1940
3-18
dry open places east of Pala

Pala Grade

no W. end Borrego V.

15584 Fagonia chilensis laevis (Standl) Jtn
5 Dalea Schottii pubescula (Parish) Munz
6 Trixis calif Kell.
7 Bebbia juncea (Benth.) Greene
8 Petalonyx linearis Greene
9 Beloperone calif Benth
15590 Trichoptilium incisum Gray
1 Nemacladus
2 Ditaxis lanceolata (Benth.) Pax & Hoffm.
3 Euphorbia setiloba Engelm.
4 Lupinus concinnus Agardh
5 Ceanothus Greenii Parry
6 " divaricatus eglandulosus Torr
7 Malvastrum densiflorum Wats
8 Castilleja foliolosa B. & A
9 Ceanothus crassifolius Torr.
15600 Pedicularis densiflora Benth.
1 Cuscuta on Dalea
2 Hymenoclea Salsola
3 Parietaria floridana Nutt
4 Physalis crassifolia Benth
5 Arctostaphylos tomentosa
6 Rhus ovata Wats
7. Lotus strigosus (Nutt.) Greene
8 Rafinesquia neomex
9 Achyronychia
15610 Orobanche Cooperi Gray
1 Or. leptocarpa Greene
2 Dalea Emoryi Gray

3-17 San Felipe 3 000
Banner Grade 3-18

Dripping Springs

Borrego V
1 no. end

San. Felipe V

Borrego V

15613 Chaenactis glevrordes
4 Palafoxia
5 Descurainia
6 Euphorbia melanadenia Torr.
7 Arabis perennans Wats
8 Prunus eriogyna Mason
9 Lupinus arizonicus Wats. var?
15620 Ue. deltoides T & F
1 Quercus Engelmannii Greene
2 Ceanothus crassifolius Torr.
3 Condalia Parryi Uebert.
4 Stephanomeria exigua Nutt.
5 Baileya pauciradiata Harv. & Gray
6 Erodium texanum Gray
7 Plantago insularis fastigiata
8 Ue. micrantha exfoliata (Nels) Mans.
9 Gilia eremica
15630 Thamnosma montana
1 Palafoxia linearis
2 Peritylе Emoryi Torr
3 Geraea canescens T & G

San Felipe V

Borrego V. no end

San Felipe V

Borrego

San Felipe
Borrego

Trip to 29 Palms, Pinto Basin, etc

15634 Abronia pogonantha Heimerl
5 Dalea mollis Benth
6 Dithyrea calif
7 Geraea canescens T. & G
8 Gilia Matthewsii Gray
9 Baileya pleniradiata
40 Astragalus Coulteri Benth
1 Baileya pauciradiata H. & G
2 Palafoxia linearis Cav.
3 Nama demissum Gray
4 Cryptantha micrantha (Torr.) Johnston
5 Achyronychia Cooperi T. & G
6 Phacelia crenulata Torr.
7 Physalis crassifolia Benth
8 Hofmeisteria pluriseta Gray
9 Gilia inconspicua
15650 Mohavea confertiflora
1 Ile brevipes Gray
2 Lupinus arizonicus Wats
3 Lycium Andersonii Gray
4 Mirabilis Bigelovii Gray
5 Phacelia minor (Harv.) Mach
6 Ephedra calif Wats ♂
7 " " ♀
8 Poa scabrella (Thurb.) Benth
9 Orthocarpus purpurascens Palmeri
15660 Oenothera bistorta Hallii Jeps

March 22-24, 1940

sandy desert, Old Dale

" " Dale Dry Lake

Carlyle Mine

whitewater C 2 mi no of blvd,

Gray

15661 Orobanche fasciculata Nutt. var
2 Mentzelia involucrata megalantha
3. Senecio calif DC.

4 Pencephyllum Schottii Gray
5. Larrea divaricata Cav.
6 ~~Psathyrotes~~ Trichoptilium incisum Gray
7 Phacelia crenulata Torr. var. ambigua
8 Malvastrum rotundifolium Gray
9 Eriog. Thomasii Torr.
15670 Psathyrotes ramosissima (Torr) Gray
1 Gilia punctata (Gray) Munz
2 Euphorbia polycarpa Benth var. hirtella Boiss
3 Mohavea confertiflora (Benth.) Heller
4 Brandegea Bigelovii (Wats.) Coop.
5 Argemone platyceras Link & Otto
6 Chaenactis stevioides H & A.
7 Ile. deltoides T & F
8 Dithyrea calif Harv.
9 Malacothrix calif DC var glabrata Gray
15680 Euphorbia polycarpa hirtella Boiss
1 Eschscholtzia glyptosperma Greene
2 " minutiflora
3 Erodium texanum Gray
4 Salvia columbariae Benth
5 Dalea Parryi T & G
6. Nama hispidum spathulatum
7 Lepidium lasiocarpum Nutt

franciscana Whitewater

Johnston

rocky wall, so. base Pinto Mts.
road Dale to Cottonwood Spgs 3-23

Macbr

Old Dale, sandy desert 3-22

Gray

Gold Crown Mine 3-23

Pinto Basin

15688 Filago depressa Gray

9 Dalea mollis Benth.

90 Galea filifolia Harwoodii Craig

1 Orobanche Ludoviciana Cooperi

2 Beloperone calif Benth

3 Cryptantha racemosa (Wats) Greene

4 Mentzelia involucrata megalantha

5. Brandegea Bigelovii Cogn

6. Atrichoseris platyphylla Gray

7. Senecio mohavensis Gray

8 Psilostrophe Cooperi (Gray) Greene

9 Juniperus

15700 Bernardia

1 Galium stellatum eremicum

2 Gilia inconspicua (Smith) Dougl

3 Cryptantha pterocarya (Torr) Greene

4 Triodia pulchella HBK

5 Festuca octoflora Walt.

6. Bromus Trinii Desv.

7 Rafinesquia neomexicana Gray

8 Cryptantha angustifolia Greene

9 Arabis pulchra Jones

15710 Lupinus sparsiflorus Benth

1 Oe. clavaeformis aurantiaca Wats

2 " refracta Wats

3 Dsmeris arborea Nutt.

4 Lupinus sparsiflorus Benth

5 Ellisia

Pinto Basin
Gold Crown
Dale Dry Lake

3 mi so. Cottonwood Springs 3/24

Jtn.

Carlyle Mine
2 mi no Cottonwood Springs

3 mi no. C.S. 3/23

15716 Phacelia Campanularia Gray
7 ~~Lotus~~ Lotus rigidus (Benth.) Greene
8 Cryptantha decipiens (Jones) Heller
9 Mimulus Bigelovii Gray
15720 Eriophyllum Wallacei Gray
1 Chaenactis Fremontii Gray
2 Lotus tomentellus Greene
3 Malvastrum exile Gray
4 Lepidium lasiocarpum Greene
5. Pectocarya platycarpa M-y
6. Sphaeralcea ambigua Gray
7 Cryptantha ~~angustifolia Greene~~
8 " barbigera (Gray) Greene
9 " pterocarya (Torr.) Greene
15730 Muhlenbergia microsperma (DC.) Kun
1 Lotus tomentellus Greene
2 Trichoptilium incisum Gray
3 Chaenactis Carphoclinia Gray
4 Peritile Emoryi Torr
5 Monoptilon bellioides (Gray) Hall
6 Euphorbia stictoba Engelm
7 Eriogonum Thomasii Torr
8 Chorizanthe brevicornu Torr.
9. Dalea mollis Benth
15740 Hyptis Emoryi Torr.
1 Plantago insularis fastigiata Jeps.
2 Eriogonum inflatum Torr. & Frem.

3 mi No of C.S. 7/23

Pinto Basin

Carlyle Mine 3-22

Kunath

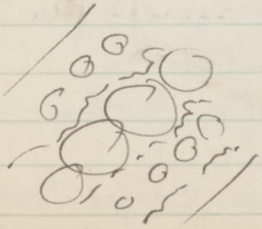
15743 Chorizanthe spinosa Wats.
4 Chaenactis stevioides H & A
~~5 Ac. decorticans var condensata~~

15745 Scrophularia calif. Cham.
6 Cercocarpus betuloides Nutt.
7 Ribes malvaceum Sm.
8 Collinsia heterophylla Graham
9 Solanum umbelliferum Esch.
15750 Convolvulus occid
1 Spergula arvensis L
2 Orthocarpus purpurascens
3 Cryptantha intermedia Greene
4 Lotus scoparius (Nutt) Ottley
5 Monardella crispa Elmer
6. Lupinus arboreus Sims
7 " truncatus
8 Ceanothus cuneatus (Hook) Nutt
9 Phacelia distans Benth
15760 Lupinus Chamissonis Esch.
1 " nanus Dougl
2 Eriogonum capitatum (Dougl) Greene
3 Calandrinia ciliata Menziesii
4 Lepidium
5 Corethrogyne
6 Orthocarpus attenuatus Gray
7 Arctostaphylos pungens HBK

with So Calif Botanists

near Surf, Lompoc Santa Barbara Co 4/9-10, 1938

Nuttallia



15768 Platystemon californicus Benth
15769 Fritillaria biflora Lindl.
70 Erodium macrophyllum H & A.

15771 Aster Orcuttii Vasey & Rose
2 Lepidium lasiocarpum Nutt.
3. Atriplex lentiformis (Torr.) Wats
4 Allenrolfea occid. (Wats) Kuntze
5 Cuscuta salina squamigera Yuncker?
6 Lycium Fremontii Gray
7 Calandrinia ambigua (Wats.) Howell
8 Plantago insularis fastigiata
9 Mentzelia involucrata Wats
15780 Gilia Matthewsii Gray
1 Coldenia plicata Cov.
2 Re clavaeformis Peirsoni Munz
3. Astragalus insularis Harwoodii
4. Euphorbia polycarpa hirtella Boiss.
5. Abronia villosa Wats.
6 Orobanche Cooperi Gray
7 Croton calif mohavensis Ferg
8 Scirpus Olneyi
9 Nicotiana trigonophylla Dunal
15790 Dalea mollis Benth.
1 " Emoryi Gray
2 Orobanche
3. Achyronychia Cooperi Gray

Hills so of San Dimas May 1, 1940

Jan. 27, 1940
2 miles east of Carrizo Stage Station
Carrizo Station Jan. 28
"
"
"

wash, 13 mi SE. of Valle citos, near Palmitos Spg.

15794 Lotus tomentellus Greene
5 Astragalus Crotalariae (Bunth.) Gray
6 Baileya pauciradiata Harv. & Gray
7 Palafoxia linearis Cav.
8 Atriplex polycarpa (Torr) Wats
9 Eriogonum Thomasii Torr.
15800 Encelia frutescens Gray
1 Tidestromia oblongifolia Standl.
2 Coldenia plicata Cov.
3 Gilia Matthewsii Gray
4 Dalea mollis mollissima (Rydb.) Munz
5 Chorizanthe
6 Euphorbia polycarpa hirtella Boiss.
7 Cryptantha angustifolia Greene
8 Aristida adscensionis L.
9. Geraea canescens T. & G.
15810 Chaenactis carphoclinia Gray
1 Astragalus insularis Hanvordii
2 Gilia latifolia Gray
3. Perityle Emoryi Torr
4 Eriogonum nodosum Small
5 Viguiera deltoidea Parishii
6 Aplopappus propinquus Blake
7 Rhus ovata Nutt
8. Ephedra trifurca Torr
9 Euphorbia Melandenia Torr
15820 Lotus argophyllus (Gray) Greene
1 Chorizanthe Hinckleyana laciniata Jeps

1-28-1940

13 mi SE Vallecitos

Box Canyon Mason Valley 1-30-'40

Mason Valley, near mouth Quiflamme C 2700 ft

15822 Cuscuta salina squamigera Yuncker
3 Echeveria lagunensis Munz
4 Astragalus insularis Harwoodii Munz
5. Nemacladus
6. Senecio mohavensis Gray
7. Mimulus Bigelovii Gray
8 Hoffmannseggia microphylla Torr.
9. Ae. cardiophylla Torr.
15830 Euphorbia polycarpa hirtella Boiss
1 Monoptilon bellioides Hall
2. Lupinus arizonicus Wats
3. Trixis calif. Kell.
4. Chrysothamnus
5 Eriogonum deflexum Torr
6. Chrysothamnus paniculatus (Gray) Hall
7. Ditaxis lanceolata (Bunth.) Pax + Hoffm.
8 Euphorbia polycarpa hirtella Boiss
9 Dyssodia porophylloides Gray
15840 Hibiscus denudatus Bunth
1 Eriogonum nodosum Small
2 Beloperone calif. Bunth
3. Lotus rigidus (Bunth.) Greene
4. Eriophyllum Wallacei Gray
5. Gnaphalium palustre Nutt
6 Cassia armata Wats
7 Erodictyon trichocalyx lanatum Jeps
8 Lycium Parishii Gray

Mason V.

3 mi E of Carrizo 1-26
so. of C. Creek, 2½ mi W. of Carrizo 1-27

3 mi E of Carrizo
5 mi NW of " 1-27

Canebrake Canyon

15849 - Senecio mohavensis Gray
15850 - Cheilanthes Covillei Maxon
1 - Lyrocarpa Coulteri Hook & Harv.
2 - Euphorbia polycarpa Benth
3 - Euphorbia eriantha Benth
4 - Pluchea camphorata (L) DC
5 - Dalea Parryi Torr
6 - Aristida adscensionis L.
7 - Porophyllum gracile Benth.
8 - Euphorbia eriantha Benth
9 - " pediculifera Engelm.
15860 - Lyrocarpa Coulteri
1 - Muhlenbergia microsperma Kunth
2 - Lotus argophyllus Greene
3 - Hyptis Emoryi Torr
4 - Oenothera micrantha ex foliata Munz
5 - Euphorbia polycarpa Benth ?
6 - Salvia apiana compacta Munz
7 - Mollugo cerviana (L.) Ser.
8 - Euphorbia melanadenia Torr.
9 - Pellaea
15870 - Stillingia linearifolia Watson
1 - Eriogonum inflatum Torr. & Frem.
2 - Lotus scoparius brevialatus Ottley
3 - Selaginella Bigelovii Underw.
4 - " eremophila Maxon

Agua Caliente Spngs 1-28

Vallecitos

SE end Vallecito meadow
~~2 mi SW. of "~~ 1½ mi S. of Campbells 2800

rocky hill, Franks Stephens Ranch, Mason V.

15875 Eriogonum nodosum Small
6 Lotus eriophorus var. Hermannii Ottley
7 Chrysothamnus paniculatus (Gray) Hall
8 Amaranthus fimbriatus Wats
9 Aplopappus cuneatus var. spathulatus Blake
15880 Chrysothamnus nauseosus var. ceruminosus
1 Monardella Robisonii Epling
2 Graphalium
3. Artemisia Ludoviciana Nutt.
4 Eriogonum molestum Davidsonii Jeps
5, Euphorbia micromera Boiss
6. Krameria Grayi Rose & Painter
7. Larrea
8 Cassia armata Wats
9 Franseria dumosa Gray
15890 Eriog. inflatum T. & F.
1 Bouteloua aristidoides Griseb
2 Brickellia desertorum Cov
3 Viguiera deltoidea Parishii Vasey & Rose
4 Baccharis brachyphylla Gray
5 Brickellia arguta Robinson
6 Salazaria mex. Torr.
7 Euphorbia setiloba Engelm
8 Mollugo Cerviana
9 Atriplex polycarpa (Torr) Wats
15900 Aplopappus acradenius eremophilus
1 Cleomella oocarpa Gray

Oct. 20, 1939 Trip to 29 Palms.

2-3 mi So of 29 P 3000 ft.

4 mi so of highway, W. end Joshua Tree Hall

dry ~~wash~~ slope
Schenckia
seedlings
"
"
"
2 1/2 mi So of 29 Palms

1 mi E. 29 P

at 29 P

15902 Eriog. Plumatella D v H

3 Stephanomeria

4 Prosphyllum gracile Benth

5 Muhlenbergia microsperma Kunth

6 Bebbia juncea aspera Greene

7. Trianthema Portulacastrum L.

8 Hymenoclea Salsola T. & G.

9 Chrysothamnus paniculatus Hall

15910 Boerhaavia Wrightii Gray

1 Pectis papposa Gray

2 Boerhaavia Wrightii gray

3 Chrysothamnus Teretifolius (D v H) Hall

Trip with Schencks

15914 Selaginella Hanseni Hieron.

5 Arabis platysperma Gray

6 Epilobium

7 Circaea pacifica Asch. & Mag

8 Epilobium glaberrimum Barbey

9 Eupatorium occid.

20 Penstemon breviflorus Lindl.

1 Collinsia Tinctoria Hartw

2 Arabis repanda Wats

3 Garrya flavescens Wats.

4 Spiraea caespitosa Nutt.

5 Gilia pluriflora Heller

6 Eriogonum virgatum Benth.

7 Lessingia leptoclada Gray

8 Gnaphalium canum Nutt

29 P

29 Palms

dry rocky bank, Boyden Cave, So. Fork
Kings R, Fresno Co. 4000 ft. 7/11/40
Cedar Grove Camp 5000 July 9
Sheep Creek 5500

Grizzly Creek Falls, Kings R 7-11

Boyden Cave 4000 7-11

Gen. Grant to Kings R. 5000 7-15

15929 Eriodictyon Parryi (Gray)
30 Brodiaea coronaria
31 Qe. Hookeri Hookeri near var angustifolia
2 Trifolium microcephalum Pursh
3 " involucratum fimbriatum
4 " variegatum Nutt.
5 " monanthum Gray
6 " " tenerum Pursh
7 Castilleja miniata montana (Congdon)
8 Phacelia heterophylla Pursh
9 Osmorrhiza nuda Torr.
15940 Chrysopsis Breweri Gray
1 Lotus nevadensis
2 Arnica amplexifolia Rydb
3 Helenium Bigelovii Gray
4 Onosmon newberryi Gray
5 Arctostaphylos mariposa Dudley
6 " patula Greene
7 Habenaria longispica (
8 Ribes Roezlii Regel
9 Habenaria sparsiflora Wats
15950 " leucostachys "
1 "
2 Nemophila parviflora Dougl
5. Epilobium exaltatum Drew
6 " oregonense Hausskn
7 " brevistylum ursinum
8 " exaltatum Drew
9 Tofieldia occidentalis Wats

--- So. Fork Kings, below Copper Creek, 5100 July 10

" — Zumwalt Meadows, 5000

Mc Dermott

Copper Creek 5200

Zumwalt Meadows
Lewis Creek, 6600 July 12

7800
6700
6500
7500

7700
7800
6700
7700

Frying Pan Meadow 8000 July 12

7900
8000

Jeps

15960 Montia Chamissoi Dur. & Jac.
1 Mimulus Dudleyi grant?
2 " rubellus Gray
3. Collomia parviflora Dougl
4 Erigeron Coulteri Porter
5 Collomia grandiflora Dougl
6 Scirpus microcarpus Presl
7. Monardella villosa Sheltonii
8 Epilobium glaberrimum
9 Pyrola picta Sm.
15970 Penstemon caesius Gray
1 Arabis
2 Epilobium brevistylum ursinum
3. Saxifraga integrifolia Hook
4 Arabis platysperma Gray
5. Erigeron salsuginosus Gray
6 Penstemon laetus Gray
7 Gilia leptalea (Gray) Greene
8 Heterocodon rariflorum Nutt.
9 Boykinia major Gray
15980 Campanula prenanthoides Dur
1 Streptanthus tortuosus Kell
15982 Descurainia calif (Gray) Schulz
3 Strept. tortuosus orbiculatus Hall
4 Thalictrum Fendleri Engelm
5 Phacelia heterophylla frigida Jepso
6 Cassiope Mertensiana G. Don
7. Penstemon procerus Grah.

Fryxell Pass Stube Meadow
9m

Jeps

Standard Memorandum Book

Ruled $ and Cts.	Ruled Faint	Ruled Faint and Indexed Through	Size	No. of Leaves
6544	6545	6545½	5 x 3	48
6550	6551	6551½	6⅛ x 3¾	48
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6556	6557	6557½	6⅞ x 4¼	48
6558	6559	6559½	"	96
6560				
6562	6563	6563½	7¾ x 4¾	48
6564	6565	6565½	"	96
6566			"	144
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Nelder Grove Oakhurst Madera Co 5500 7-16

Tioga Pass, 9600 7-17

B&P No. 6565

15988 Eupatorium occid. Hook

9 Selaginella Wälsoni Underw.

15990 Phyllodoce Breweri (Gray) Heller

1 Spiraea densiflora Nutt.

2 Eriogonum nudum Dougl.

3. Arnica nevadensis Gray

4. Holodiscus

5. Symphoricarpos ~~orothitus~~ Gray vaccinoides Rydb

F 26 Potentilla glandulosa lactea

Sat 27 Kalmia polifolia microphylla

S 28 Salix subcoerulea P Sprn

9 Monardella odoratissima Benth.

16000 Barbarea orthoceras Ledeb.

1 Penstemon Newberryi

2 Potentilla Douglasii Greene

3 Eriog. incanum T & G

4 Salix Eastwoodiae Cockerell

5 Heuchera rubescens glandulosa Kell

Tioga Pass